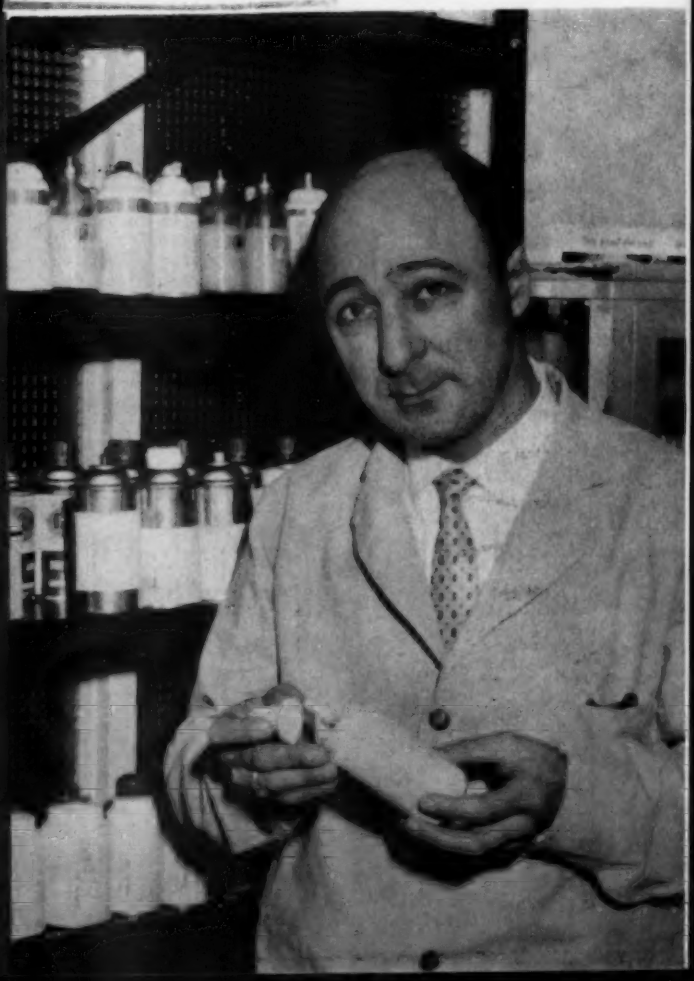
AEROSOL AGE

THE MAGAZINE OF PRESSURE PACKAGING

Pharm

Pharmacy Library
PURDUE UNIVERSITY
MAR 14 1958
LIBRARY



Sun-Lec's Aerosol Line
CSMA Announces Food Symposium
Aerosols at Garden Show
Aerosols in Germany
New Aerosol Toothpaste
Aerosols in High School

March, 1958

NOW!

Cowles

DIETHYLTOLUAMIDE

(DETAMIDE 95)

Cowles is now on stream with the U. S. Army Quartermaster and Department of Agriculture discovery diethyltoluamide, claimed by scientists to be the best repellent yet for mosquitos, flies, chiggers and ticks.

Cowles DETAMIDE 95 (minimum assay meta isomer—95%) is in production now.

Cowles DETAMIDE 85 (minimum assay meta isomer—85%) will be available soon.

Highly resistant to perspiration and normal wear-off, Cowles DETAMIDE is a colorless liquid with a pleasant cosmetic fragrance.

Full technical information and prices upon letterhead request.

DETAMIDE 95 is packed in 5 gal. and 55 gal. drums—available one drum to a carload.

Cowles

ORGANIC CHEMICAL DEPARTMENT

CHEMICAL COMPANY

Cleveland 3, Ohio

MARCH, 1958 VOL. 3, No. 3

AEROSOL AGE

The magazine of pressure packaging

THIS MONTH'S COVER

Research director Salvatore Noto, of Sun-Lac Inc., Newark custom filler, examines a new aerosol formulation being shelf-tested. Relying on formulation techniques, research, and small filling runs, Sun-Lac has built up a profitable specialty-type custom filling operation that apparently defies recession damage. Story on the company's policies, equipment, and personnel begins on page 12.

Feature Articles

SUN-LAC—FORMULATION SKILLS AND SMALL PRODUCT RUNS..... 12
SYMPOSIUM ON AEROSOL FOODS ANNOUNCED FOR IFT MEETING.... 16
CSMA ANNOUNCES BASIC MEETING SCHEDULE FOR MAY MEETING.... 16
AEROSOLS AT NEW YORK GARDEN SHOW..... 17
AEROSOLS IN GERMANY..... 20
WECO INTRODUCES NEW AEROSOL TOOTHPASTE..... 25
AEROSOLS ARE PRODUCED BY STUDENT CLUBS..... 28
AEROSOLS IN REVIEW..... 34

Departments

IN THE SPOTLIGHT THIS MONTH..... 8
NEW PRODUCTS AND PACKAGES..... 18
PRESSURE PACKAGING OVERSEAS..... 32
By Dr. Tom C. Clark
CONSULTANT'S CORNER 29
By Robert A. Foresman Jr.
NEWS OF PRESSURE PACKAGING..... 40
EQUIPMENT, PROCESSES & BULLETINS..... 51
CONVENTION CALENDAR 59
WHO'S WHO IN PRESSURE PACKAGING..... 60
CUSTOM FILLERS AND PACKERS..... 63
NEW PATENTS 69
CLASSIFIED ADVERTISEMENTS 71
INDEX TO ADVERTISERS..... 73
OVER THE TRANSOM..... 74

Wayne E. Dorland
Publisher

Donald A. Davis
Editor

Eleonore T. Kanar
Technical Editor

Ralph Dorland
Advertising Manager

Roger Appleby
Eastern District Manager

Doris Metz
Circulation

Address all correspondence to Box No. 31, Caldwell, N. J.

Subscription Rates: U. S., one year $3, two years $5; Canada and Pan America one year $4, two years $7; Foreign one year $7, two years $12.

Single Copies: current issue: $0.50. Back issues $1.00. Postage and handling charges for foreign countries on single copies: $1.00.

Published monthly on the 20th by Aerosol Publications, Inc. at 229 West 28th St., New York, N. Y. Advertising, Subscription and Editorial Office: Box No. 31, Caldwell, N. J. New York telephone: BArclay 7-7121. Advertising rates on application. Closing date for copy—1st of the month preceding month of issue.

Second-class mail privileges authorized at Post Office Caldwell, New Jersey, with additional entry at New York, New York.

The Crucible of Experience

IN AEROSOL VALVES

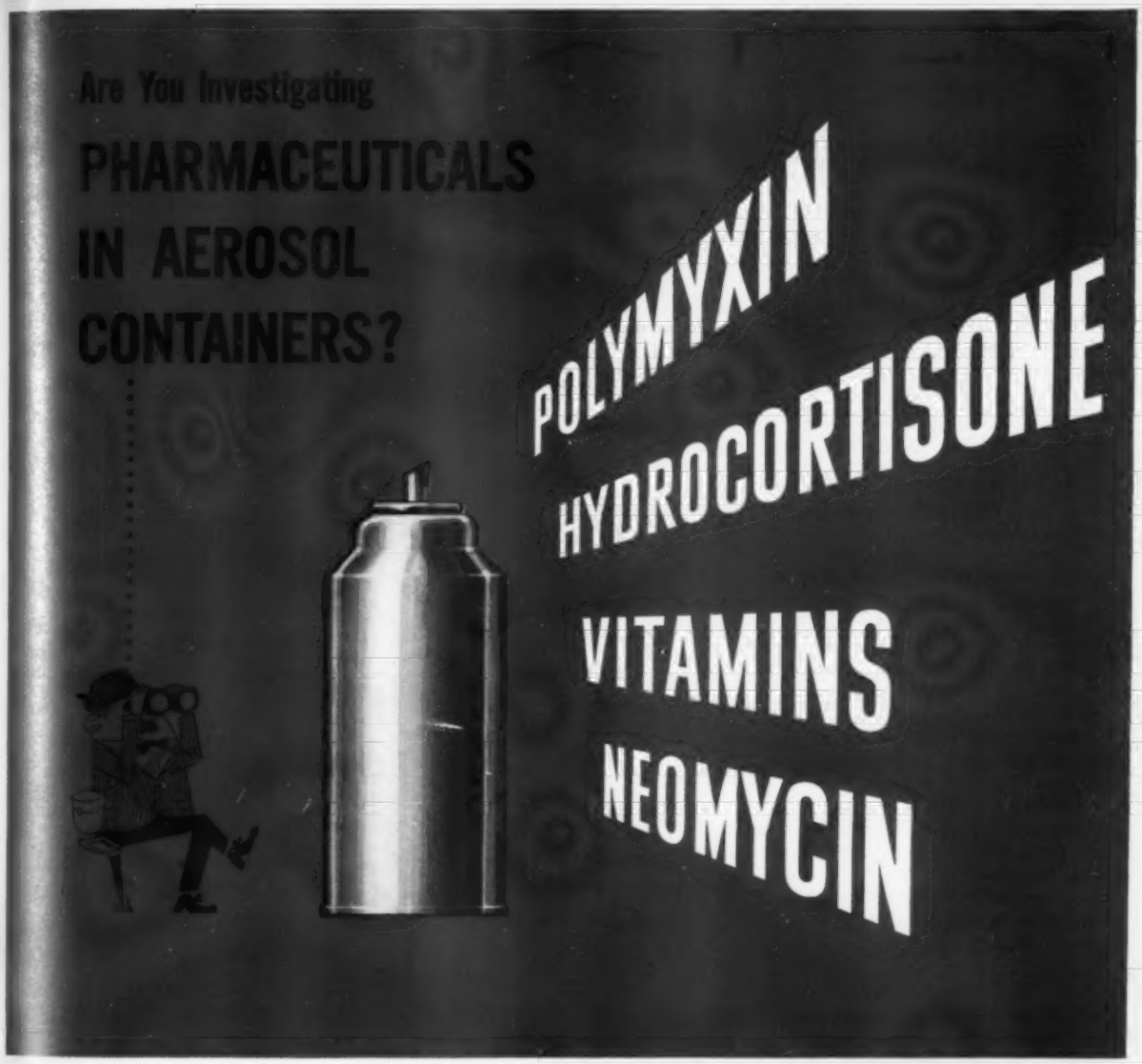
Nothing melts down problems faster than experience at getting things done right. Just such a background at Sun Tube, in serving the packaging industry for over 30 years, now rewards the making of aerosol valves. Today, Sun Tube Aerosol Valves are performing on thousands of consumer items without clogging, jamming, or dip tube blow-off. Truly, the product of experience. Investigate.

IN COLLAPSIBLE TUBES

Since Sun Tube produced its first collapsible tube for a toothpaste concern over 30 years ago, more man hours and experience have been applied to the specific development and quality control of collapsible tubes by Sun Tube, than by any other company in the world. Investigate.

Sun Tube
CORPORATION

At the Packaging Show Booth #1511 — HILLSIDE 5, N. J. — WAverly 3-0400



A Progress Report from Pfizer, a Pioneer in Antibiotics.

Day by day the list of successful pharmaceutical products packaged in aerosol containers increases. Have you examined this new development?

For some months now, Pfizer has been working in close cooperation with the aerosol industry, seeking areas where pharmaceutical manufacturers could best be served by aerosol packaging.

Pfizer found that aerosol packaging shows great promise for a number of medicaments. But, of particular and immediate value to you will be information obtained on topical aerosol preparations utilizing Pfizer Hydrocortisone, and the antibiotics—neomycin and polymyxin. Initial experimentation with nitrogen propelled vitamin preparations also shows promise. Should your topical plans include polyvinyl components, Pfizer's results with its non-toxic plasticizers, Citroflex A-2 and A-4 will prove of value to you.

The acceptance of aerosol pharmaceuticals is based on their several advantages over traditional packaging:

Application is fast, convenient, uniform • Air tight containers prevent contamination • Direct contact with injured area is eliminated, often reducing pain • No waste, intermediate applicator unnecessary • Not affected by atmospheric conditions—leading to greater stability of active ingredients • Dosage may be controlled accurately with metered valves.

Pfizer will continue to pursue methods of developing successful pharmaceutical formulations for aerosols.

Manufacturing Chemists for Over 100 Years

Pfizer

CHAS. PFIZER & CO., INC.
Chemical Sales Division
630 Flushing Ave., Brooklyn, N. Y.
Branch Offices:
Chicago, Ill.; San Francisco, Calif.
Vernon, Calif.; Atlanta, Ga.;
Dallas, Tex.

from the

EDITOR'S MAILBAG

To the Editor

I wish to object to, and correct some misleading information printed in the December 1957 issue of *Aerosol Age*. On page 62, in your discussion of a cartridge-type pharmaceutical aerosol which uses an old unmetered atomizer principle, you make the completely unwarranted statement:

> "However, the conventional aerosol proved itself to be unsuitable for inhalation therapy, particularly in the field of asthmatic treatment. The distribution and size of the sprayed particles was too crude to meet the exacting specifications of the medical profession, and these factors, coupled with the chilling effect of conventional propellents have discouraged any widespread use of the aerosol in this type therapy. According to the research staff . . . , the metered valve hasn't offered any final conclusion to this problem either; for much the same reason as did the squeeze bulb; coordination is difficult for a person having an asthmatic seizure."

This paragraph, quoted from your article, is misleading on several points. First, Riker's "Medihaler-Epi" and "Medihaler-Iso" for treatment of asthma has proved to be mch more efficient in aborting asthmatic attacks than conventional nebulizers.

Secondly, the particle size of "Medihaler-Epi" and "Medihaler-Iso" preparations has been accurately determined to be 2.1 micron mass median diameter. In addition, 90 per cent of the mass of the medication is in particles between 1 and 5 micron diameter, while 98 per cent of the medication is available to the patient in particles less than 7 microns in diameter.

Third, the metered valve has proved to be an effective means of measuring exact amounts of medication to the patient. The reproducibility of delivery of medication by the valve was found to have a standard deviation of ± 4 per cent, which is practically as reproducible a dose as taking medication in tablet form.

Fourth, there is absolutely no chilling effect in using "Medihaler" preparations. The stainless steel vial containing "Medihaler" preparations allows the use of sufficiently high pressure to permit immediate evaporation of propellent in traversing the oral adapter. Since no perceptible liquid is emitted from the end of the adapter, there is no chilling effect due to evaporative cooling.

(*Continued on Page 66*)

In the Spotlight this month

● **Sun-Lac, Inc.** . . . One of the smaller custom fillers finds a logical solution to the problem to balancing its business to insure against any disruption through loss of any single major customer. Story on page 12.

● **Food Symposium Scheduled for IFT Meeting** . . . Pressurized foods, one of the most exciting of new product types, are slated to come in for considerable discussion at the Institute of Food Technologists' meeting in Chicago. Program and preliminary details on page 16.

● **Aerosols at New York Garden Show** . . . A new line of garden products, insect repellents, and specialty products is described and pictured on page 17.

● **Aerosols in Germany** . . . A translation from a leading German trade periodical provides the background material for a summary of German practices and policies on pressurized packaging, beginning on page 20.

● **Weco Introduces New Toothpaste Product** . . . A leading toothpaste marketer, Weco Products, becomes the first to nationally distribute its brand-new aerosol product. Details on page 25.

● **Students Clubs Produce First Aerosol Product** . . . Industry-sponsored student achievement associations enter the aerosol business on a somewhat modest scale! Story and photograph on page 28.

EDITORIALS

The Lowest Possible Price . . .

There has long been a tendency on the part of the aerosol industry, particularly in its early years, to price the product as cheaply as possible. When handled with common sense and intelligence, this attitude has resulted in healthy competition and a general sharpening of production techniques to turn out a better package.

However, this tendency toward the lowest possible pricing has often gone to such extremes that the entire reputation of the industry has been imperiled. In the race to put the cheapest product on the market, the resulting package has occasionally been far from a credit to the industry. Insufficiently tested formulations, components, and finished products have appeared on the market far too often.

It cannot be emphasized too strongly that the aerosol is fundamentally a luxury market item, and any tendency to think in terms of price wars, cut-throat competition, or similar devices should be firmly resisted. In no sense should the industry be penny pinching, and any individual emphasis on this type of competition should be avoided. There are obviously far too many quality factors in the aerosol package for the industry to ever think of sacrificing them for the sake of price cutting.

On this point, the aerosol industry has much to learn from the example set by its earliest brother-in-arms, the insecticide industry. In the Thirties the competition for the insect sprayer market became so intense that price alone seems to have become the sole consideration. Prices were driven down to a point at which a (supposedly) finely tooled metal or plastic sprayer was retailing at 39 cents, or even less. All kinds of short cuts were taken to cut prices, and the sprayer quickly showed the effects.

It reached a point where the consumer could use the sprayer only by getting his hands soaked with insecticide. Poor dispersion caused stained curtains and furniture, and (what was even worse), unsatisfactory kill of the insects at which it was aimed. It took very little of this for an important segment of the consumer market to be perfectly willing to give up on household insecticides completely and go back to the fly swatter and the rolled newspaper.

The obvious lesson to be learned from this is that the aerosol should never become the object of this type of "fierce" competition. There are and can be no short cuts toward manufacturing a quality aerosol package, and any attempts to force wholesale price cutting can only end in disaster.

Instead there should be more and more emphasis on the utility, ease, etc. with which the aerosol can be used. A number of leading cosmetic marketers have proved conclusively that a luxury-priced item has a definite place on the market. Although the novelty of the aerosol for the consumer may have begun to wear off, what will remain is its inherent luxury of convenience. It is up to the industry to take advantage of this without losing its shirt in the folly of driving down prices.

The CSMA Publicity Campaign . . .

Next month the CSMA's Aerosol Division will begin the second year of its excellent publicity program. At publication time, a number of possible contributors still hadn't sent in their contributions. Also, for 1958's program a number of new aerosol firms or suppliers are being asked to contribute.

All that is needed to do a highly effective consumer publicity campaign is a modest contribution from everyone in the industry. This worthy program fully deserves all the support it can get.

Sun-Lac, Inc.

Relying on formulation skills and small filling runs, a Newark custom packager finds a way to prevent serious business disruption through loss of any one customer.

WHAT can the custom filler do to avoid the possibility of his entire business being wiped out or seriously damaged through the loss of a single major customer? At a time when several major cosmetic companies have recently begun their own filling operations, how can the filler reasonably insure that his company won't be the next to be crippled by the withdrawal of a good portion of his business?

Sun-Lac, Inc., Newark, N. J. custom filler, has apparently found one logical solution. A separate department concentrates all its activities on the small customer and at the same time the company takes special pains to maintain a flexibility and a resilience that give it a good chance to survive no matter how many major companies begin filling their own. To offset the possibility of any one customer hurting the company, Sun-Lac also has made it a standing policy to accept no single order for more than 65% of its production capacity.

It accomplishes this by recruiting its customers from three major groups: the small customer with one or two products, the customer with a conventional product who can be persuaded to try it in aerosol form, and the major company that wants one or more of its products filled by a custom filler. In many cases, through the work of its well equipped and well staffed research department, the company is instrumental in having the prospective customer convert to aerosols. It offers the customer a complete formulation service, thus, in effect, turning its own laboratory and technicians over to work on essentially a full-time basis for the customer.

This last service has been highly important in the success of the company. The progressive research department, directed by Salvatore Noto, has been directly responsible for a wide variety of new applications for the pressurized package. For instance, Sun-Lac has had a high degree of success with such hard-to-handle aerosol products as sachets, perfumes, body powders, shampoos, shoe shines, and rubber sprays. It has done some of the early formulation work with silicone sprays (for industrial mold releases), furniture polishes, anti-static sprays, penetrating oils, polyethylene sprays, nail polish dryers, and number of other highly specialized products. This same research department has been responsible for the discovery of a new polymer for hair sprays, a number of distinctive new perfume odors, and a method of efficiently packaging powder sprays to avoid valve clogging.

AS were so many aerosol filling companies, Sun-Lac was started in 1949 as a part-time operation. It was formed that year by Daniel J. Rubenfeld, its president, mainly to manufacture and market a tinted lacquer spray to be applied to store windows.

Mr. Rubenfeld became interested in aerosols, then in their infancy, as a means of dispensing his lacquer. He became so fascinated with the whole idea that, after studying the equipment then in use, he designed and built his own pressure filling equipment in 1950. Even after the first filling line was installed and in operation, the company's aerosol activities were still on a part-time basis. At this time the firm occupied 500 square feet at Hillside, N. J.

In 1953, Mr. Rubenfeld acquired a partner, Donald Light, a production expert, and moved his embryo firm to new quarters at Kenilworth, also in New Jersey. The lacquer manufacturing and merchandising activities had been given up completely in 1950, and by 1953 Sun-Lac was devoting all its activities to custom filling.

By 1955 the rapidly expanding aerosol industry, with its demands for more and more filling facilities, was threatening to push out the walls of the small Kenilworth plant; and in November of that year the company moved to its present 30,000 square-foot site in Newark, New Jersey.

Even this expansion hasn't been enough to take care of the company's present and anticipated business, for within the next two or three years Sun-Lac will increase its operational space by 75,000 to 100,000 square feet.

From its modest beginnings in 1950, when it was using one semiautomatic line (for which all the equipment was designed and built by Mr. Rubenfeld), Sun-Lac has built its capacity to 500,000 or more containers per week. It currently operates three highly flexible filling lines, which could, in the event of a maximum effort requirement, be enlarged to four complete filling lines.

Of these one is a new Mojonnier cold fill unit, and the others are made

Sun-Lac's Mojonnier cold filling line in operation. The girl at left is putting empty containers on the line. The woman in the center is filling the containers with a special silicone ingredient, an addition to the regular product being inserted by the product filler.

After propellant and product have been injected into the cans, the valves are inserted and then crimped. The woman inserting the valves also spot weighs the cans as part of Sun-Lac's quality control program.

The cans are also spot weighed before they enter the hot water bath (center background).

Daniel J. Rubenfeld, Sun-Lac president

up of elements designed by Mr. Rubenfeld, together with parts furnished by Mojonnier and other equipment manufacturers. One of the three permanent lines is a pressure unit specifically designed for filling perfumes and small-size containers. There is also some work being done by the research department with nitrogen filling equipment, and sometime later this year the company anticipates installation of a nitrogen line.

Though his pressure filling equipment has been a considerable success (at least two major essential oil suppliers are currently using it in their research laboratories). Mr. Rubenfeld has had to relinquish his activities in the design of pressure filling equipment, to devote more and more time to the increasingly diversified filling activities of Sun-Lac.

"What success we have had," he points out, "is due primarily to the fact that we have grown with our customers — and serviced the manufacturer of the conventional product who wanted to put out an aerosol product but didn't quite know how to go about it. We market no products of our own, and make it clear that our research findings and any special products or processes are available to our customers and potential customers."

"Our research department," says Mr. Rubenfeld, "deserves a good deal of the credit for the success of this particular type of business. Fortunately, it has been able to maintain a position of relative leadership in the development of specialty formulations. For instance, at least a year prior to the first marketing of a window cleaner, our research department developed a competitively priced spray product with a conventional fluorinated hydrocarbon propellant. It also developed what we believe was the first successful shoe shine, the first pressurized egg shampoo, and an early water-based spray deodorant."

Harry Freidenberg, production chief and Donald Light, superviser of production.

RELYING heavily on its research department and the flexibility of quick change-over of its filling lines, Sun-Lac has serviced such customers as Carven, Mary Chess, U. S. Radium Corp., Renuzit, Gimbel's, Bergdorf Goodman, Revlon, and a host of other major companies. Another big segment of the company's business comes from such firms as Electronic Chemical Corp., Novocol Chemical Mfg. Co., The O'dell Co., Bro-Dart Industries, Home & Garden Specialties Co., and many others for which Sun-Lac does a substantial amount of the developmental work—and then fills the companies' orders.

Sun-Lac has considerably sharpened its change-over operation. Depending on the product, the pressure filling lines can be changed over from one product to another in one-quarter to one-half of an hour. For the cold fill line the change-over takes one to three hours.

Mr. Rubenfeld cites one particular case in which he competed on the basis of service, using his flexibility for the benefit of his customer:

"This particular customer had been having his entire yearly production (some 30,000 containers) done by another filler. The whole run was

To avoid the possibility of accident, Sun-Lac's hot water bath is covered by a transparent plastic protective cover.

The product mixing room contains one 1000-gallon stainless steel kettle and several smaller ones.

Part of Sun Lac's diversified product line. It includes, an anti-static spray, a shoe shine, a hair lacquer, a special scissor spray, a lubricant, and a rubber spray.

filled in a single day, and consequently the customer was obliged to use up all his working capital at one time. Also, he was faced with the task of warehousing his entire year's supply in the limited facilities he had at hand."

"This situation went on for several years, until we suggested that the 30,000 be run off 100 cases (2400 containers) at a time—as his sales demanded. By doing this we were able to relieve him of much of the warehousing chore, and at the same time free his capital for added advertising and merchandising campaigns. Because of this the customer's sales increased by 50% in six months, and within a year he had expanded his sales volume to 100,000 containers. Also, since we began filling for him he has used our research facilities to develop two additional products — thus further increasing his business, and ours too."

BY way of its experience with Carven, Mary Chess, and some of the other perfume marketers, Sun-Lac probably can lay a legitimate claim toward having as much uncoated glass experience as any other custom filler. The consensus of opinion of the research and production staff of the company seems to be that, despite reports and opinions to the contrary, uncoated glass containers can be as safe to fill as any other type —provided common sense is used in the filling operation, and in the formulation.

Mr. Noto reports: "We have never had a serious accident in the filling of uncoated glass containers. The only accidents that have occurred, and these have been minor ones, have been the result of weak containers crumbling under the crimping machine." To minimize this type of occurrence, Sun-Lac's special perfume filling line is equipped with plastic shields to protect the operators. Also, the formulation is checked carefully by Mr. Noto and his staff, who are also responsible for quality control.

Sun-Lac's other facilities have grown abreast of its filling capacity expansion. On both floors of the building it currently occupies it has extensive warehousing facilities, for both empty containers and filled ones. In the basement of the building are located a battery of propellant storage tanks, alcohol storage facilities, the water heater for the hot water test tanks, air compressors, and a vault for keeping the many expensive perfume products the company fills.

However, the first floor of the building is the main operational floor. Here are located the three filling lines, the offices, and employee cafeteria, the research laboratory, the product mixing room, and more warehousing facilities. In the product mixing room there is a total of over 5,000 gallon-

(*Continued on Page* 66)

500 Million-Container Market Forecast For '58

INDUSTRY-WIDE production of pressure cans in 1958 will reach half a billion or more units, the American Can Co. forecast last month. Robert Hollister, Canco's assistant national sales manager in charge of pressure cans, estimated that 1958 pressure can output will be approximately 19% greater than the previous record of about 420 million cans last year.

"Manufacture of pressure cans for food products this year should exceed 100 million units, compared with about 70 to 75 million in 1957," he said. "Production of non-food aerosols will be about 400 million cans, up from about 350 million last year."

The strongest growth items in 1957 were pressure cans for paint, room deodorants, shaving lather, hair sprays and insecticides, he reported. He said that output of aerosol cans for paint, insecticides, shaving lather and deodorants may each pass the 50-million-cans-a-year mark in 1958 and that hair spray can production may reach 100 million units.

The first widespread use of larger containers for paint and insecticides in 1957 met with increased consumer acceptance, Mr. Hollister added. The growing popularity of 14 and 16-ounce pressure cans indicated that many consumers want additional product quantity for more painting and insect spraying capacity from a single can. This demand is one of the factors leading to the expectation of over-all growth in these two fields, he said.

"It is likely that 1958 will be a key year in the development of the pressure can industry," Hollister said. "We expect sharply increased use of aerosols by the food industry and believe the year may see general introduction of toothpaste and shampoos in pressure cans. Several brands of toothpaste in pressure cans are currently being test-marketed."

He said that Canco has developed a new "foolproof" pressure can for toothpaste and other items that will dispense the product regardless of the position the can is held in, making it possible to use the entire contents of the can and eliminating the necessity of reformulating the paste. The company also is perfecting a pressure can that will satisfactorily hold and dispense liquid shampoo, a heretofore "hard-to-hold" product in metal containers.

"Future development in the food field is expected to come through introduction of new pressurized products, such as syrups, spreads, sauces, toppings and similar items. Develop-

(*Continued on Page* 66)

Aerosol Food Symposium Announced for Meeting of Food Technologists' Group

A "SYMPOSIUM on Pressurized Foods," the first such presentation undertaken by the Chemical Specialties Manufacturers Association in cooperation with another trade association, will be held in conjunction with the annual meeting of the Institute of Food Technologists in Chicago. The meeting is scheduled for May 25-28 at the Palmer House, just after the May 19-21 midyear meeting of the CSMA (in Cincinnati).

In addition to the symposium, which will be a complete discussion telling the food manufacturer how he can convert to aerosols, a plan is being put forward to have an aerosol information center, sponsored by the CSMA's Aerosol Division, at the exhibit. Space in this exhibit would be rented to CSMA firms in the aerosol field to distribute information and meet with the more than 1500 food technicians who usually attend the IFT meeting. A. A. Mulliken, assistant secretary of the association, will be in charge of the exhibit, which will be part of a general exhibition of about 100 suppliers to the food industry that customarily display their wares at the IFT meeting.

A preliminary program was issued recently by the Food Liaison Committee of the Aerosol Division. It consisted of the following:

The Background of the Pressurized Food Industry by W. E. Graham.

Technical factors in the Packaging of Pressurized Foods, a paper to be built around the premarketing check list of the CSMA for pressurized foods, to be presented by Dr. Johns of American Can Co.

Special Problems in Pressurized Food Packaging — Heat Preservation of Pressurized Foods, by E. D. Giggard of the Continental Can Co.

How a Food Manufacturer can Start and Complete a Pressurized Food Program, by R. C. Webster, of Western Filling Corp.

The Food Manufacturer Looks at the Potential Pressurized Food Market to be presented by a representative of Heublein, Inc.

•

CSMA Lists May Program

THE CSMA last month issued a preliminary schedule of its 44th midyear meeting, which is scheduled for May 19-21 at the Hotel Netherland Hilton, Cincinnati. The program includes an afternoon meeting of the Aerosol Division on Tuesday, (May 20) and a joint session of the Aerosol and Insecticide Divisions, (on the afternoon of May 21).

In addition to its joint session with the Aerosol Division, the Insecticide Division will hold another meeting on the morning of May 20th. The morning of Wednesday, the 21st will be taken up by a meeting of the general session.

Attendance is expected to be large for the meeting, and H. W. Hamilton, CSMA secretary, has issued a statement urging that reservations should be made as early as possible. The Netherland Hilton has a number of hospitality rooms.

The basic schedule is as follows:

Basic Program

Monday, May 19, 1958

Board of Governors
Division Administrative Committees
General Committees
Scientific Committees
Division Committees

Tuesday, May 20, 1958

Morning
Meeting of the Insecticide Division.
General Luncheon
Afternoon
Aerosol Division
Evening
Company "Open House" in Suites and Hospitality Rooms

Wednesday, May 21, 1958

Morning
General Session
General Luncheon
Afternoon
Joint Session — Aerosol and Insecticide Divisions
Evening
Cocktail Party
Banquet and Entertainment

•

Barr Installs Nitrogen Unit

Operation of nitrogen filling facilities at G. Barr and Co., Chicago, is now under way with pilot production of pressure packaged dental creams. Announcement of the new installation was made early last month by George Barr, president of the aerosol custom filling company.

Mr. Barr said that launching of the new production line follows more than six months of laboratory and engineering development work. The fairly recent availability of suitable valves made possible the practical development in nitrogen dispensing, although the potential for nitrogen as a propellant has been realized for many years.

According to Mr. Barr, the company made the installation in preparation for the "imminent" ascendance of pressure packaging in the 500,000,000-unit annual dentifrice market. He reported that production quality control on the new filling line features a pressure check of every completed dentifrice package; removal of excess nitrogen from dip tubes, and purging of air from the containers.

He added that special detection techniques are employed in leak testing of nitrogen pressurized packages which require more stringent precaution than with other propellants

Aerosols Featured At New York Garden Show

MORE aerosols than ever before in its history were featured at the National Garden Supply Trade Show at the New York Coliseum Feb. 2-4. Insecticides, weed killers, insect repellents, and gibberellic acid formulations occupied the principal attention of the exhibitors at the show, and a number of leading marketers displayed pressurized products for the very first time.

Though aimed specifically at garden supply dealers, hardware store operators, farm outlet supply owners, etc., the show attracted several thousand of the general public, mostly home gardeners.

In number of aerosol products displayed, The Garden Division of Boyle-Midway, Inc., New York, tied DuPont with five pressurized packages. Two of Boyle-Midway's products, "Antrol Rose Spray" and "Antrol Violet and House Plant Insect Bomb" were insecticides, the first in a 15-ounce container with a formulation of lindane, pyrethrins, rotenone, captan, and karathane. The African Violet aerosol is being marketed in a six-ounce container and has a formulation of pyrethrins, rotenone, and piperonyl butoxide.

"Antrol Instant Leaf Shine" was the third of Boyle-Midway's "Antrol" line in pressure form to be exhibited. This too was in a five-ounce container, and will retail at 89 cents. It is intended mainly for ivy, philodendron and other hard surfaced leaves.

Two versions of dog and cat repellents, one for indoor and the other for outdoor use, were also displayed. Trademarked "Ridz Dog Repellent", the residual repellent is designed to keep dogs and cats off furniture, rugs, shrubs, tree trunks, flowers, etc.

DuPont also exhibited five aerosols, including its new repellent formulation based on diethyl toluamide. Called simply "DuPont Insect Repellent", it was shown as a five-ounce aerosol, as well as in conventional lotion. Another specialty type product was "DuPont Tree Wound Dressing", for rapid and easy treatment of wounds resulting from pruning, grafting, or accidents. The material sets quickly to form a smooth black seal against moisture and decay while natural healing is taking place. It is packaged in a 12-ounce container.

"DuPont Garden Insecticide", a new formulation combining methoxychlor and malathion recommended for use on flowers and ornamentals, vegetables, fruit trees, etc., was another garden product shown. There were also the "Rose Spray Duster" (containing a fungicide as well as an insecticide) and the "Lawn Weeder", an aerosol containing 2,4-D. All these garden products are being packaged in 12-ounce containers.

The National Carbon Co. Division of Union Carbide unveiled two brand new aerosols under the tradename "Eveready". One the "Rose Spray" is a formulation of pyrethrins, rotenone, captan, and karathane. The second, called "Home and Garden Insect Killer", contains piperonyl butoxide, pyrethrins, methoxychlor, and rotenone.

Gibberellin sprays came in for considerable attention. American Chemical Paint Co., Miller Chemical & Fertilizer Corp., and Science Products Co., Inc., all exhibited new gibberellin products in pressurized form.

Miller Chemical & Fertilizer also showed its "Hi-Tox Insect Spray", its "Fly and Mosquito Spray", and its "Chlordane Roach & Ant Spray". Science Products showed its new "Blossom-Set Bomb", a specialty product to stop the dropping of tomato blossoms. It is claimed that, through use of the product, tomatoes will ripen up to three weeks earlier than usual. It will retail at $1.79.

Among the other exhibitors showing aerosol products were Swift & Co. ("End-O-Weed Spot Weeder" and "End-O-Pest" Rose and Garden Spray") and B. G. Pratt Co. (Pratt's Rose and Floral Spray" and "DX Aero-Spray", an insecticide for African violets and house plants).

A new feature of the show this year was a dealer workshop supple-

(*Continued on Page* 65)

Windex, a new 14-ounce version of the familiar liquid window cleaner produced by the Drackett Co., Cincinnati, is being marketed in a Continental Can container. The label is printed with transparent light blue ink. It is retailing at about 69 cents.

Lucky Whip, Dessert Topping is the first aerosol food product of Lever Brothers, New York. It is pasteurized and homogenized and is said to last for six weeks. The new container has full-color lithography by Crown Can, with a white molded plastic cover.

Camette, a new brand name, has been introduced by Strouse, Inc., of Norristown, Pa. for a lilac sachet and an old lavendar sachet mist, "Zesty Spice" and "Fresh Pine" (air refresheners) and "Spra Set" (a PVP hair spray). Cans are Crown "Spra-Tainers" with Precision valves.

Al-Sol, a new aerosol suntan spray packaged by Compania Argentina de Cosmeticos, Buenos Aires, was introduced recently in an 8-ounce lithographed aluminum container. It utilizes a Safca (of Argentina) valve and will be marketed in Argentina and possibly elsewhere in South America.

Sportcraft Self-Spraying White Court Marking Paint is the first aerosol product of General Sportcraft Co., Ltd., Bergenfield, N. J. It enables the sportsman to line up his own tennis, shuffleboard, badminton, or volley ball court on any suitable surface. The ten-ounce container, powered by "Freon," retails at about $1.00.

NEW PRODUCTS AND PACKAGES

Wizard Spray Deodorizer and Air Sanitizer was introduced recently by Boyle-Midway Division of American Home Products, New York, in two sizes, retailing at 69 and 98 cents. The product is fortified by "TD-4", an anti-bacterial material.

Charles Antell Hair Spray, a product of Charles Antell, Inc., Baltimore, is now being marketed in five different sizes of Canco containers. Two of the cans, the seven and 14½-ounce sizes, are new additions to the previous range of 2½, 5, and 11-ounce containers. All cans are fully lithographed.

Color Curl, a new product of Roux, New York, was introduced in late January in six colors ranging from brown to platinum. The color, which contains no shellac or lacquer, reportedly shampoos out. Its retail price is $1.50.

Aerosols in Germany*

VINYL chloride and mixtures of propane and butane are finding increased use as aerosol propellants in Germany, it was reported recently in *Das Drogisten-Fachblatt*,* German-language trade publication published in Darmstadt. They are being used either alone or in combination with various proportions of the conventional fluorinated hydrocarbons, which although relatively safer to use, are somewhat more expensive.

For certain products, if a small quantity of fluorinated hydrocarbons are mixed with vinyl chloride, the mixture is rendered non-flammable—thus permitting its use in insecticides. For other products containing flammable chemicals (such as acetones in paint removers) as much as 80% conventional propellant would have to be added to render the vinyl chloride mixture non-flammable. Such aerosol types, however, are usually too expensive, mainly because of the relatively small amount of active product in the total mixture. In such cases, again according to individual product requirement, the less expensive vinyl chloride may often be used safely by itself.

Vinyl chloride and propane-butane mixtures are both approved by German governmental authorities, even though the latter are highly flammable, and the former much less so. Vinyl chloride's ignition point lies in the relatively high temperature range of 545° to 565° Centigrade. For many products it is an excellent solvent, and it is almost odorless.

Spruhtechnik GmbH, Rheinfelden, Baden, a leading German aerosol marketer and manufacturer, is currently employing vinyl chloride as its principal aerosol propellant. According to tests published in technical magazines, an air concentration containing up to 0.5% vinyl chloride can be breathed for hours without danger, and it is on this basis that the propellant has been adopted so widely by Spruhtechnik. This concentration, it is pointed out, is rarely reached—even if an aerosol container filled with vinyl chloride is emptied into a room of normal size. Also, it has been discovered that vinyl chloride has no adverse or toxic effect on the skin.

THEORETICALLY, the number of aerosol products that can be aerosol packaged is almost unlimited. There are certain non-technical boundaries, however, which (in Germany) are crossed when the aerosol package offers no particular advantage over the conventional packaging method and has, accordingly, only curiosity value.

It necessarily follows that the aerosol can be a genuine market success only if it meets one of the following specifications: (1) it creates a new product (hair fixative); (2) offers a basic improvement in the product itself (an insecticide); or (3) simplifies the application (shaving cream).

The product must be specifically formulated for the aerosol package and must be compatible with each component as well as with the propellant. In most cases, this means a complete reformulation, since many products in their conventional form are either non-soluble in the propellant or are too viscous to meet normal valve and product application requirements.

The determinants of which propellant is to be used in a particular product are: the active product and its constituent chemicals, the solvent or co-solvent, the desired internal container pressure, and, often most paramount, the cost.

In cosmetic products, it is especially necessary to test essence and perfume compatibility with propellant. If the odorizing agent is not compatible or stable over a period of time, it alters the fragrance of the aerosol product.

In Germany, the principal containers are either seamed or drawn (seamless) black plate or tin plate cans. The black plate containers have a special anti-corrosion internal lacquer coating (depending on the product) and impact-extruded aluminum containers are also widely used. Most containers fall into the six, 12 or 18-ounce size categories.

Two-ounce glass bottles are also available, though in all cases these are coated with a transparent or opaque plastic film.

With valves, we cannot expect one universal valve to function equally

*This article was extracted from "Aerosols—A New Marketing Possibility" by Horst Launeroth in the journal *Das Drogisten-Fachblatt* for October 15, 1957.

A DROP OR A STREAM AT THE TOUCH OF A FINGER!

with Precision's new valve and spout

FOR ANY LIQUID OR SEMI-LIQUID FOOD PRODUCT

because . . .

THERE IS NO PRODUCT DETERIORATION

The hermetic seal is maintained until the product is completely used.

THERE IS NO REFRIGERATION NEEDED

An inert propellant means no oxidation . . . the product stays as packed.

The Perfect Container for . . .

PACKAGING **DISTRIBUTING** **STORING** **SELLING**

PRECISION

Precision engineers would like to show you how your product can be successfully packaged in a non-aerated pressurized container . . . The one container with built-in sales appeal. The one container with a proven impulse-sales appeal that guarantees big turnover. Inquire today on your business letterhead, there's no obligation, of course.

PRECISION VALVE CORPORATION 700 Nepperhan Avenue Yonkers, New York

well with all types of products—mainly because of the vast differences in product requirements. Spruhtechnik currently uses mostly the American-made Risdon valve, which, due to the interchangeability of the spray nozzle, has been found suitable for a number of different product types. However, other leading valve types are also used—according to the characteristics of the particular product.

The U.S. and Japan already have metering or dosage valves and a German-made version will be marketed early this year. The latter will be employed mostly for special products and purposes (i.e. pharmaceuticals) which, to a large extent, have not yet been fully developed in Germany.

THE vast differences in the German and U.S. market are so pronounced that an examination of each is important in order to understand the reason for the German lag.

In the U.S. basic production costs are lower—since all chemicals, valves, and containers, are locally manufactured and nothing has to be imported. Furthermore, the manufacturer, wholesaler, and retailer are willing to accept a smaller profit margin per unit because of the large turnover. This is naturally reflected in the end price of the product. Most American manufacturers make every possible effort to keep their per-unit prices under one dollar (even if only by one or two cents).

Due to the high purchasing power of the American consumer, a good product at a reasonable price usually finds a large and ready market. In the German market the situation is a completely different one. The price of a can of shaving lather, which in the U.S. represents considerably less than 1% of a worker's average weekly earnings, may represent in Germany (at the German retail price compared to German wages) more than 4% of his weekly wage.

The American public not only has more money to spend, but also has an inherent curiosity about new products—a trait that may never develop in Germany. With some exaggeration, one could say that Americans seem to lose interest in an article that has been on the market longer than one year! U.S. manufacturers are constantly bringing out new products with only slight changes and in new package forms, so that one gets the impression that only new articles representing the latest in progress and development meet with pronounced market success.

In Europe production costs are higher, and in many countries any production at all without imports is impossible. Even if local production *is* available, necessary license fees add to the costs. Then too, small unit profit margins cannot be employed because there is no large market turnover, and also because the structure of retail selling outlets is markedly different.

As has been noted, the European's purchasing power is much lower; and, particularly with new products, the conservatism of the European buyer is not to be overlooked. There are countless cases in which brand name products have held their place on the European market for scores of years. At the present time, in Germany, it is a requirement that articles for mass consumption must represent the latest in technical developments, but hardly dare carry a new name.

In the aerosol field these difficulties developed early, with efforts to overcome them being confined to the use of such slogans as "new" or "quite new" in the text of the label or in the advertising. However, a point is made of keeping the original brand name, if only for prestige reasons.

Anyone who has seriously studied the problem of "throw-away" containers knows that this too has a direct bearing on German volume production of aerosol products. Because of the necessity of living more economically, it is only with greatest reluctance that an empty container is thrown away. This false sense of values can be only a deterrent to those who have never tried and therefore do not know the advantages of the aerosol package. The advantages of hair fixatives, insecticides, air fresheners, are so great that the aerosol cost plays only a very minor role.

For the European market, aerosol propaganda must emphasize the following points:

(1) a more economical product usage.
(2) greater effectiveness for the same quantity.
(3) simplicity of application.
(4) time saving.

This last factor is becoming increasingly important. There is at present no other packaging method that offers more inherent advantages. With other forms of aerosols, such as shaving lathers and colognes, there is no real price saving; but the handiness and the practicality of the aerosol package is not to be denied. These product types in aerosol form will therefore be preferred as gifts and luxury items.

It should be pointed out here that the present German trend toward "quality products" and more modern packaging techniques is growing just as fast as the rising buying power of the German people—two factors that will contribute greatly toward higher aerosol production and sales.

It is readily evident that the market possibilities for aerosols in Germany (as well as in all of Free Europe) can only be improved when definite consumer advantages can be established, through a factual and realistic presentation. In this field, the professional advice of the salesman and the shop owner to the individual customer plays a major role.★

"Black Leaf" Line Sold

Diamond Black Leaf Products, a subsidiary of Diamond Alkali Co., Cleveland, last month sold its line of house and garden insecticides to Black-Leaf Products Co., a newly-formed Illinois corporation.

The new firm is presently establishing operations in the Chicago area; and, pending establishment of its own manufacturing operations, it will lease a portion of Diamond's Louisville, Ky. plant. Black Leaf Products was organized by a group headed by A. K. Paul.

"Dr. West's" Aerosol Toothpaste Shipped for National Distribution As Scramble for Market Continues

PUSH-BUTTON toothpaste is bound to be big! This seems to be the unanimous opinion among aerosol fillers and dentifrice marketers alike . . . and as a result the industry has reacted with a frenzy comparable only to the days of the first low-pressure "bug bomb" twelve years ago. Scrambling to get in on the ground floor, fillers have sent their salesmen scurrying with samples . . . and a few marketers, in turn, have launched test markets in hopes of determining good consumer reaction to initiate full speed production.

The fact of the matter is, however, that the hopes of the entire industry can be dashed by an underdeveloped product. Toothpaste is a far cry from an insecticide or a room deodorant. It must meet not merely the food and drug regulations but a whole list of stringent consumer requirements as well. It must be free-flowing paste that ejects easily and almost completely from the can, a minimum amount of sag when applied to the brush, an obviously sanitary package, and by no means least, a truly effective tooth cleaner that will also be pleasing to the consumer's taste. A miss, or even a near-miss, on any one of these requirements could easily send the public back to the conventional squeeze tube.

While several brands of push-button toothpastes are presently being market-tested in various cities—one brand, "Dr. West's," appears to be the first to be moving rapidly into national distribution.

For several weeks Connecticut Chemical Research Corp. of Bridgeport, Conn., has been producing the complete "Dr. West's" product (including the cream) and truckloads have been moving daily to the national market.

When Connecticut Chemical Research introduced "Polysols" to the industry in May 1956, they represented a development wherein the pressurized packaging of numerous products (which could not be produced with conventional liquefied gases) was made practical through use of several types of non-liquefied gases. A pressurized toothpaste was one of the family of products demonstrated as able to be pressurized with the then radically new use of non-liquified gases for propellants. This early product was a laboratory sample showing that it *could* be done, and had been actually tested as a useable dentifrice, but it was hardly ready to market. Much more time and research had to go into its formulation, packaging, special manufacturing equipment, and quality control facilities to insure a quality product on a large production basis.

Problems of Formulation

At first, the problem of developing a free-flowing type of paste for pressurized containers seemed relatively easy: simply modify current tube type formulations by adding water or humectant, or by combining these materials. This was successful initially; but accelerated aging tests made under temperatures ranging from 40-100°F. resulted either in extreme setting up of the paste (in some instances to the point where less than 50% of the contents could be dispensed) or equally extreme thinning which led to a breakdown of the paste formulation and precipitation of solids.

When it was found that this problem applied to every standard tube type formulation, it became obvious that there was only one answer: to reconstruct a formulation (such as "Dr. West's") specifically for pressurized dispensing.

What are the special characteristics required in a free-flowing paste formulation? After studying lengthy tests, Connecticut Chemical Research chemists outlined them as follows:

I *Good Emptying Characteristics.* Less than 10-15% of the product should remain in the can after final use. (These percentages are based on a seven-weight-ounce fill.)

II *Minimum Amount of Sag When Applied to the Brush.* It was felt important that the consistency of the paste should be such that it would adhere to the top of the bristles, rather than sagging to the bottom of the brush.

III *Only the Slightest Change in Viscosty During Aging and Temperature Changes* — and good recovery if slight changes should take place. (This stability is of particular importance in pressurized containers because the consumer must be able to dispense the paste by simply pressing the valve. He can't apply a "little more pressure" as he might when squeezing a tube.) Under the aging test, the product must stand storage alternately between 40° and 100°F., and show no change from the original viscosity when returned to ambient conditions. If the viscosity varies slightly when read at the actual storage temperature, this is of relatively little importance providing the range is within acceptable limits.

IV *Minimum Vapor Phase Corrosion.* While posing no serious problem in conventional tube type products, in push-button pastes, certain flavoring oils are conducive to can corrosion at high temperature storage if not formulated with special care.

V *Controlled Pressures.* It is most important that gassing of the product should be carefully

(*Continued on Page* 64)

AEROSOL

PACKAGING

can give your sales "steamroller" power!

Here's how General Chemical can help you get started...

If you've been watching the aerosol field, you've seen product after product come out in aerosol form and roll over its competition with irresistible force.

Could *you* market an aerosol that would have similar success?

A qualified "yes"

If your products can be sprayed, brushed on, dusted or daubed, aerosol packaging may well give them that vital "push." And now's the time to get started—while the field is still growing . . . while consumers still think of convenience packaging in aerosol form as "new" and exciting.

General Chemical can help you

As the producer of "Genetron" aerosol propellants, General Chemical has the basic knowledge and specialized experience you need to get started. We will be glad to supply market information and technical data. We can tell you about promising new types of aerosol formulations developed in our laboratories. We can tell you about qualified contract fillers—who can take over the entire production job for you, from test market quantities to commercial production. The fact is, you don't have to invest a cent in special equipment or personnel to get into this profitable market!

These information services of General Chemical are available to you without cost or obligation. Why not take advantage of them now? Just call or write "Genetron" Department, General Chemical Division, Allied Chemical & Dye Corporation, 40 Rector Street, New York 6, N. Y.

genetron®
aerosol propellants

The right propellant for every aerosol need

GENERAL CHEMICAL DIVISION
40 Rector Street, New York 6, N. Y.

Allied Chemical

Industry-Sponsored Student Clubs Manufacture First Aerosol Product

Breck Sponsors Junior Co.

John H. Breck, Inc., Springfield, Mass. aerosol marketer, is sponsoring a junior achievement company for the third consecutive year. Junior Achievements, Inc., is a national organization composed of 3000 student-operated and industry-sponsored companies throughout the U. S. Its aim is to produce an effective educational program to help teenagers develop an understanding of our economic system.

The companies, which are composed mainly of high school seniors, last just one year, after which they are liquidated. The following school year, new groups of teenagers form new firms.

Teen Chemical Co., the firm which Breck is sponsoring this year, is currently marketing its own product, a liquid detergent called "Dish-Wish". It is being manufactured, bottled, and packaged by the 16 teenage members of the firm.

THE first aerosol product to be manufactured by a Junior Achievement company, a national high school organization to study the activities of industry, was unveiled last month by Jatnik Chemicals, a J. A. company sponsored by the Givaudan Corp., Delawanna, N. J. Called "Wiz-a-Squeak," the aerosol lubrication oil was shown publicly for the first time at a Junior Achievement "Open House" held at the Passaic, N. J., YMCA.

Jatnik Chemicals was presented with the award for the best display at the "Open House" by the Passaic Chapter of the Kiwanis. At the ceremonies, Dr. Boris R. Kaufman, chairman of the Passaic Kiwanis Committee for Education and Social Action, presented a bronze plaque to Arlene Logioco, president of the winning company. Miss Logioco, in turn, remanded the plaque to Lawrence Ansell, senior advisor from Givaudan. The plaque will be displayed in the plant office of the sponsoring company along with other awards previously won by Junior Achievement companies sponsored by Givaudan. Each student in the winning company also was presented with gold keys by the Passaic Kiwanis.

Jatnik Chemicals first product was an excellent waterless hand cleaner containing Hexachlorophene. Called "Wiz-a-Way," it reportedly gained an "enviable" sales record, at least as far as junior achievement products go. "Wiz-a-Squeak" is also reported to have been a success. Harry Saunders, Peter Porcaro, and George Schlegel, other Givaudan advisors reported that the students had designed and executed their winning display with practically no help from them.

Consultant's Corner

by Robert A. Foresman, Jr.

The Function of the Consultant

FIVE years ago this month I announced the availability of my consulting services to the aerosol industry. Since that time the industry has come of age and the employment of consultants as one method of doing things the easy way has become increasingly popular. However, there is still a great deal of misunderstanding as to how these services work and what a consultant actually can do for a client.

No consultant has any knowledge that cannot eventually be gained by his client, but the consultant's knowledge is immediately available and consists of knowing not only what *can be* done successfully, but also what has *not* worked in the past. As a result time and money can be used with a minimum of lost motion.

Fundamentally, the aerosol consultant should be a bulwark between the customer and the rest of the world on matters pertaining to any phase of the aerosol industry. The services may include any or all of the following:

Advice on general economics of the field.

Advice on types and sources of equipment.

Advice on proper components for a particular purpose.

Providing of formulations (established and new).

Carrying out of test programs (all aspects).

Evaluation of components or raw materials.

Test certification for legal or regulatory agencies.

Advice on plant layout.

Advice on safety procedures.

Efficiency studies.

Liaison between suppliers and client.

Training of personnel.

Establishment of quality control procedures.

Preparation of formal reports (for any of the foregoing where requested or indicated by the nature of the work).

The most effective use of consulting services can be made where they are brought into the picture in the earliest stage of planning, since quite frequently this can result in a significant improvement in the original approach to the problem.

Free discussion of all phases of the client's problems will enable the consultant to render advice and service in line with his own thinking. Also, it may make it possible for the consultant to handle some of the client's problems directly, without his being involved at all.

GENERALLY, there may exist two distinct types of relationship between a client and a consultant. The consultant may be placed under contract for a specific project which, when completed, terminates the relationship for the agreed-upon fee. This type of arrangement is primarily of value where an organization (which is competent to handle its problems) decides that it lacks either time or the facilities to carry out some special program and turns it over as a self-contained project to a consulting organization for solution.

The other common arrangement is a contract calling for a retainer to be paid by the client to the consulting firm, in return for which, all the client's aerosol problems, up to the amount of time specified in the retainer contract, can be dumped into the consultant's lap for solution. This relationship is most valuable for a client new to the field or lacking in the technical facilities or know-how necessary to assure him that he will not deviate from good practice as he enters competition with established firms. The retainer basis is actually a guarantee that competent guidance in all phases of the industry will always be as near at hand as the telephone, which means that the newcomer to the field can use his time to develop the commercial and sales aspects of his business without being required to learn by costly experience what is already known and available to him.

It goes without saying that would-be contract or captive fillers are not the only ones who can make good use of consulting services. Raw material suppliers and component manufacturers are usually just as much in need of good counsel as those concerned with actual production of finished products. Quite frequently the manufacturer of a component will have encyclopedic knowledge of his own field, but be so lacking in knowledge of the field of specialized application (in which his product is used) that literally thousands of dollars can be wasted in wrong approaches and ineffective market preparation.

Unfortunately for good promotion, it is frequently difficult for a consultant to prove the value of his services. One of the most important functions he can perform is to protect his client from making costly mistakes. The value of a mistake can be measured, but to estimate the value of a three-sentence comment, which may be responsible for changing a whole policy or approach that could have been wrong, is totally impossible.

Fortunately one of the less usual, but nonetheless important, services rendered by the consultant is the sup-

(*Continued on Page* 65)

NEW BREAK-UP VALVE OFFERS SPRAY HEAD FOR QUICK, POSITIVE

LIGHTER, WIDER Newman-Green pattern gives best operation. Such efficient dispersement increases customer acceptance for your aerosol products.

EXCLUSIVE COLOR-CONTRASTING IDENTIFICATION OF ORIFICE OPENING

Newman-Green Valve Can Color-Match Your Package, Gives Mistier Patterns to Hair Sprays, Colognes and Lotions

Newman-Green offers you another exclusive valve feature in the new mechanical break-up aerosol valve tip. Because of the two-tone spray head, you can locate the direction of the spray pattern immediately. No other valve gives you this feature. The availability of a variety of colors offers you the chance to color-coordinate the valve head with your package design. In addition, the new valve head produces a uniform pattern that is finely atomized. And, the broader spray gives a warmer end product, making it more desirable to aerosol customers.

The built in quality of the Newman-Green valve design pays off in your production line too. All valves are completely tested before leaving the plant. Thus, individual spray testing during filling operation is eliminated. The costly inventory problem is solved too when you buy Newman-Green quality valves. Since the basic valve unit is always the same, you need only to keep different spray heads in stock. And the spray heads are all interchangeable in seconds.

For all kinds of designing, engineering, and manufacturing of aerosol valves use Newman-Green. The quality you get pays off in even better aerosol packages for today and the future.

STICKY, THICK sprays of other valves distract from your product. Protect your product with quality Newman-Green valves.

Newman-Green offers a complete line of aerosol valves. For a new price schedule and free samples fill in this coupon and mail to . . .

NEWMAN-GREEN, INC.
151 Interstate Road
Addison, Illinois

Name_____ **Position**_____

Company_____ **Address**_____

City_____ **State (Country)**_____

Valve Application_____

NEWMAN-GREEN *Creative Aerosol Valve Engineering*

151 Interstate Road, Addison, Illinois

Pressure Packaging Overseas

Dr. Tom C. Clark, of Druk-Pak, Ltd., Zurich, writes of an increasing tendency on the part of European custom fillers to buy and use pressure filling equipment almost exclusively.

IT used to be inevitable that, if the United States showed any signs of economic sniffles, European countries came down with high fevers or panic pneumonia. Everytime someone even hinted at a U. S. depression or even a less violent recession, chills ran down the backs of European bankers, industrialists, and politicians. However, that was in the days of the Marshall Plan "give-away" and if the giving had slowed or stopped, Europe would have been in a bad fix. Despite its peculiar execution and sometimes fantastic administration, the Plan was carried to a highly successful conclusion, and through it Europe's industrial plant was almost completely rebuilt. Although most of the same governments remain in power, the recovery of Europe since the end of the Plan has been steady, and construction and international trade have reached new peaks. Before they recovered completely however, any economic setback in the U. S. could have dealt them a serious blow. In just a few years this situation has changed markedly.

The current economic stumble by the U. S. is not causing even a ripple in Europe. It *is* causing considerable comment, but it appears to be calm and not at all apprehensive of what effect the recession may have on Europe's economy. Throughout the Continent business is booming, with heavy buying, reasonably balanced inventories, and projected expansion plans for increased capacity in almost every line.

From the north to south trains are full of travellers on vacation, with many stopping in the Swiss Alps. There is almost a holiday mood here, which seems to reflect good earnings and sensible savings.

The aerosol industry has come in for its share of this optimism. Many of the original, or introductory installations, adequate in their time, are now obsolete and are being rapidly replaced by larger volume production machines — nearly all built on the pressure principle. In fact, to our knowledge there hasn't been a single cold line installed in Europe in the past three years.

Except for a U. S.—supplied pressure line installed last year in Italy (and another recently in England) all of Europe's pressure loading equipment has come from three suppliers, one each in the United Kingdom, Germany, and Switzerland. The Swiss machines were the first on the market and their manufacturer recently brought out a new model with double charging cylinders mounted on a single table. It also has filling heads which descend over and center the manually-handled containers. The The German producer has sturdy, volume production machines which incorporate some entirely new principles in pressure loading. Gas loss is less than 1% and one semi-automatic propellant charger will handle more than 6000 six-ounce units per eight-hour day.

The English-built machines appear to be good only for very small production runs, but satisfactory for starting operations. They employ high operating pressures, with small capacity charging cylinders, and are not really in a class with machines built on the Continent. All these units are priced well under the U. S. competition.

For obvious reasons European filling units are all semi-automatic. Labor costs do not yet justify fully automatic operations, and the German machines nearly approximate automatic production figures anyway. If required, both the German and the Swiss machines could be made quickly fully automatic with the latest in electronic controls.

We foresee that within the next couple of years (despite their relatively late start) European pressure loading equipment makers will outdistance their U. S. competition in price, performance, and efficiency. The cold line manufacturers should take notice. This may be one of Europe's unique contributions to the aerosol industry.

One hoped-for effect in Europe of the present U. S. economic slowdown is that U. S. companies will henceforth have time to give better attention to their unanswered correspondence. Everywhere one encounters remarks similar to this one: "Yes, we wrote those people in the U. S. over three months ago and, although we have written two follow-up letters, we still have had no reply. Are your people so busy at home that they have no time for foreign correspondence?"

As our own experience runs along the same lines we are hard put to it

(*Continued on Page* 68)

with safe garden sprays based on ROTENONE

Here's *double-barreled* sales appeal for you!

Rotenone combines outstanding effectiveness against a wide range of chewing and sucking insects with the high degree of safety so desirable in a general-purpose garden spray.

It has low toxicity and no build-up of harmful residues!

And the best-selling rotenone sprays are based on Penick's Brittle Extract of Cube. Our control of raw material supply, right back to its natural source, and expert processing assure a quality extract retaining maximum useful ingredients. Penick Brittle Extract contains 25-40% rotenone, plus other active rotenoids, granulated for easy formulation.

We will be glad to send samples, suggested formulations and other technical data on request and to quote on your requirements.

PENICK

Agricultural Chemical and Insecticide Division

S. B. PENICK & COMPANY 50 CHURCH ST., NEW YORK 8 · 735 W. DIVISION ST., CHICAGO 10

AEROSOLS in review

Cost Factor May Limit Food Aerosol Expansion

A REPORT on the current status and probable future of aerosol food products is featured in the February issue of *Packaging Parade*. Entitled "Pressurized Foods; An Appraisal," the report indicates that the paramount consideration governing the use of aerosols for common household food products (catsup, mustard, salad dressing, etc.) is and will continue to be that of cost.

"According to some 'realists' in the industry," the article says, "for reasons of price alone, some products will never see areosols replacing customary methods of packaging. . . . The housewife is not likely to spend 35 to 40 cents for the same amount of catsup she now gets for 19 to 20 cents in a glass bottle — no matter how much gimmick appeal the pressurized product might possess. These 'go slow' advocates agree that initial sales of a pressurized food product might very well be high, but that a staple product cannot long enjoy successful marketing unless the cost is brought to within seven to ten cents of the 'normal' price of that product.

Considerable space in the article is devoted to DuPont's new food propellant, Freon C318 — octafluorocyclobutane, which is currently under study by the Food and Drug Administration. It points out that the new propellant shares the uniform pressure characteristics of the other fluorinated hydrocarbons, and also that it has low water and a low oil solubility.

"In mineral oil it dissolves only to the extent of about 14%. With oxygenated (vegetable oils) the solubility is even less. This process, DuPont reports, has permitted some 'unusual' performance behavior in actual food formulations. For example, an oil-base flavor material has required only a small amount of propellant and yet the discharge performance has been constant throughout."

". . . One valve manufacturer states that the new propellant, if okayed, would dispense whipped cream at 10 times the liquid volume of the product. With present compressed gas formulations, the volume of whipped cream is only three to four times its liquid volume. Thus, in addition to getting maximum removal of the contents of the container, the customer would be getting more whipped cream per ounce of product as well."

•

A SUMMARY of the prospects for and problems of aluminum taking over a major share of the container market is discussed in the February issue of *Modern Packaging*. The article is based primarily on a special aluminum container survey compiled for Arthur D. Little, Inc., Cambridge, Mass., by George B. Hegeman and Bruce M. Lane.

Though the article discusses the general situation for all types of aluminum containers, its findings and conclusions can be logically applied to pressurized containers in particular. It points out that orders for Esso Standard Oil for at least 35 million containers (for oil) and by Kraft Foods for 5½ million cheese shakers will give fabricators a tremendous production run to exploit. These developments, it is indicated, may herald "one of the most significant packaging turns of the decade."

A number of factors may slow down the wholesale swing of packagers to the aluminum can:

. . ."Currently, an aluminum can *with equal* rigidity, cannot, the analysts say, be produced as cheaply as a tin can. However, Kaiser has shown that it is perfectly feasible to *deep draw* an aluminum can with walls only two-thirds as thick as those of the conventional 9-mil tinplate can; whether these 'thin walls' are sufficiently rigid for any wide range of products remains to be determined by further product experience. With impact extrusion (generally regarded as potentially the lowest-cost method), it takes 18.4 cents worth of aluminum to produce the same number of cans with comparable strength (13-mil wall) as 10 cents worth of 9-mil tinplate. Conventional three-piece aluminum cans perhaps will be able to compete only if there is complete scrap recovery of the metal. The future will depend largely on the relative price trends of raw aluminum and steel.

"Shipping weight advantages of aluminum cans are a consideration, but will to some extent be offset if there is a need for thicker walls and more effective anti-corrosion and compatibility coatings.

"Aluminum is inclined to attack tinplate's position at the moment because the former is in substantial oversupply and a 45% expansion of primary aluminum capacity is now under way . . ."

The article points out that Messrs. Hegeman and Lane predict that the narrowing cost differential and new improvements in fabrication may result in the aluminum can moving into broad commercial use a lot faster than even the current breakthrough indicates.

Of the three major methods of pro-

Aerosol Wraps

BY DONRICO

DESIGNING
PRINTING
PACKAGING

DONRICO INC., 438 WEST 37TH ST., NEW YORK 18, N. Y.

AEROSOLS in review

Cost Factor May Limit Food Aerosol Expansion

A REPORT on the current status and probable future of aerosol food products is featured in the February issue of *Packaging Parade*. Entitled "Pressurized Foods; An Appraisal," the report indicates that the paramount consideration governing the use of aerosols for common household food products (catsup, mustard, salad dressing, etc.) is and will continue to be that of cost.

"According to some 'realists' in the industry," the article says, "for reasons of price alone, some products will never see areosols replacing customary methods of packaging. . . . The housewife is not likely to spend 35 to 40 cents for the same amount of catsup she now gets for 19 to 20 cents in a glass bottle — no matter how much gimmick appeal the pressurized product might possess. These 'go slow' advocates agree that initial sales of a pressurized food product might very well be high, but that a staple product cannot long enjoy successful marketing unless the cost is brought to within seven to ten cents of the 'normal' price of that product.

Considerable space in the article is devoted to DuPont's new food propellant, Freon C318 — octafluorocyclobutane, which is currently under study by the Food and Drug Administration. It points out that the new propellant shares the uniform pressure characteristics of the other fluorinated hydrocarbons, and also that it has low water and a low oil solubility.

"In mineral oil it dissolves only to the extent of about 14%. With oxygenated (vegetable oils) the solubility is even less. This process, DuPont reports, has permitted some 'unusual' performance behavior in actual food formulations. For example, an oil-base flavor material has required only a small amount of propellant and yet the discharge performance has been constant throughout."

". . . One valve manufacturer states that the new propellant, if okayed, would dispense whipped cream at 10 times the liquid volume of the product. With present compressed gas formulations, the volume of whipped cream is only three to four times its liquid volume. Thus, in addition to getting maximum removal of the contents of the container, the customer would be getting more whipped cream per ounce of product as well."

•

A SUMMARY of the prospects for and problems of aluminum taking over a major share of the container market is discussed in the February issue of *Modern Packaging*. The article is based primarily on a special aluminum container survey compiled for Arthur D. Little, Inc., Cambridge, Mass., by George B. Hegeman and Bruce M. Lane.

Though the article discusses the general situation for all types of aluminum containers, its findings and conclusions can be logically applied to pressurized containers in particular. It points out that orders for Esso, Standard Oil for at least 35 million containers (for oil) and by Kraft Foods for 5½ million cheese shakers will give fabricators a tremendous production run to exploit. These developments, it is indicated, may herald "one of the most significant packaging turns of the decade."

A number of factors may slow down the whoelsale swing of packagers to the aluminum can:

. . ."Currently, an aluminum can *with equal* rigidity, cannot, the analysts say, be produced as cheaply as a tin can. However, Kaiser has shown that it is perfectly feasible to *deep draw* an aluminum can with walls only two-thirds as thick as those of the conventional 9-mil tinplate can, whether these 'thin walls' are sufficiently rigid for any wide range of products remains to be determined by further product experience. With impact extrusion (generally regarded as potentially the lowest-cost method) it takes 18.4 cents worth of aluminum to produce the same number of cans with comparable strength (13-mil wall) as 10 cents worth of 9-mil tinplate. Conventional three-piece aluminum cans perhaps will be able to compete only if there is complete scrap recovery of the metal. The future will depend largely on the relative price trends of raw aluminum and steel.

"Shipping weight advantages of aluminum cans are a consideration, but will to some extent be offset if there is a need for thicker walls and more effective anti-corrosion and compatibility coatings.

"Aluminum is inclined to attack tinplate's position at the moment because the former is in substantial oversupply and a 45% expansion of primary aluminum capacity is now under way . . ."

The article points out that Messrs. Hegeman and Lane predict that the narrowing cost differential and new improvements in fabrication may result in the aluminum can moving into broad commercial use a lot faster than even the current breakthrough indicates.

Of the three major methods of pro-

ARDEN for MEN
FOAM
SHAVING CREAM
WASH FACE WITH SOAP AND WATER. RINSE AND LEAVE VERY WET. SHAKE CONTAINER WELL. REMOVE CAP AND HOLD CAN IN UPRIGHT POSITION. DEPRESS VALVE RELEASING FOAM IN PALM OF HAND.
WITH FINGERTIPS APPLY FOAM TO BEARD AND SHAVE IMMEDIATELY.
MANUFACTURED BY ELIZABETH ARDEN

Aerosol Wraps

BY **DONRICO**

DESIGNING
PRINTING
PACKAGING

DONRICO INC., 438 WEST 37TH ST., NEW YORK 18, N. Y.

ducing aluminum cans (conventional fabrication, deep drawing, and impact extrusion) only the latter two are seen as possibilities for any major breakthrough in the aerosol field. Victor Metal Products Corp., which has announced plans for widespread production of competitively-priced pressurized cans, utilizes an impact extrusion method, similar to that used to form the collapsible metal tube. "To obtain sufficient strength these cans are expected to be 12 or 14 mils thick, compared with 9 mils for 'tin' cans. However, this can be contrasted with an initial investment cost of around $1 million for conventional can-making equipment, while impact-extrusion facilities cost $100,000 to $300,000."

Aerosols are seen as the logical package types to take advantage of aluminum's merchandising appeal. "In Europe, where tinplate in expensive, aluminum containers have been used for many years. Europeans have also developed effective coating systems that overcome many corrosion problems. The lack of comparable coating technology in this country has been a major stumbling block to the widespread domestic use of aluminum aerosol cans."

"In the fabrication of aluminum cans, conventional processing techniques must be altered. Magnetic controls must be converted to mechanical systems and the handling of finished cans is complicated by high surface friction, lighter weight, and low resistance to denting. New handling techniques include the use of pneumatic tubes to move cans between units.

"The limited product compatibility of aluminum in comparison with tin is also expected to retard its acceptance. Many acids and salts corrode aluminum. In some cases anodizing (with 4-6 microns of aluminum oxide) or coating with a chemically inert resin improves compatibility. However, since pin-holing and discontinuties in the coating cannot be completely avoided, neither of these techniques is completely effective. In addition to increasing compatibility, anodizing enhances the appearance of the cans exterior. This merchandising advantage is difficult to assess in terms of cost.

"Another advantage of aluminum is the variety of shapes possible from impact-extruded and deep-drawn processes. This freedom from the stereotyped 'tin-can' shape will provide added sales appeal."

•

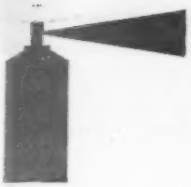
MECHANICALLY-produced aerosols have proven useful in binding of the coal dust in coal mines to the underlying surfaces—the object being to render the coal-dust indispersable—declares a recent issue of *The Colliery Guardian*, English trade publication for the mining industry.

"Aerosols of a suitable size distribution can be produced by a rotating disc type of insecticide spray gun, and these, if released near the source at the same time the dust is dispersed, should settle at the same time as the coal dust. By this means, it should be possible, according to the nature of the aerosol, either to produce an inert mixture of dusts or an efficient binding action.

"Calculations show that, with the heaviest makes of dust, material atomized into the ventilation at the rate of 150 grm. (5½ ounces) per minute with a mean drop size of 25 microns in diameter) should give the desired results. However, one major drawback does arise. The individual droplets, which consist of water containing salt or a suitable binding agent, tend to evaporate, since drops of such fine dimensions have a life of no more than four seconds."

•

A GENERAL survey of the insect repellent picture, together with an evaluation of future markets, is featured in the February issue of the *Journal of Agricultural and Food Chemistry*, a publication of the Ameri-



Rx for increased pharmaceutical sales...

Aerosol packaging with

ISOTRON®

Aerosol packaging creates new popularity . . . and new sales . . . for pharmaceutical products. Spray-on bandages, pressurized ointments, aerosol antiseptics, bronchial and nasal sprays are typical of the pharmaceuticals that have taken advantage of this modern packaging technique through ISOTRON propellents.

High-quality ISOTRON propellents meet exacting requirements for pressure, stability, solubility and particle size. ISOTRONS are nontoxic, nonflammable, noncorrosive. They're backed by over 40 years of *specialized* Pennsalt research in fluorine, the chemical that gives propellents their stability.

Call or write Pennsalt today for technical consultation on your formula. We can help you avoid many problems, improve consumer acceptance and produce economically. And for expert, experienced production, contact one of these leading contract loaders.

Pennsalt® Chemicals
ESTABLISHED 1850

ISOTRON Department 581
PENNSALT CHEMICALS CORPORATION
Three Penn Center, Philadelphia 2, Pa.

Aerosol Loaders Specializing in Pharmaceuticals

Aeropak, Inc.
Chicago, Ill.
Aerosol Industries Div. Zenith Drug
Newark, N.J.
Aerosol Techniques, Inc.
Bridgeport, Conn.
Airosol Company, Inc.
Neodesha, Kansas
Allied Professional Associates Ltd.
Buffalo, N.Y.
Armstrong Laboratories
Boston, Mass.
Associated Brands Inc.
Brooklyn, N.Y.
G. Barr and Co.
Chicago, N.Y., Los Angeles
Capitol Packaging Co.
Forest Park, Ill.
Connecticut Chemical Research Corp.
Bridgeport, Conn.
Continental Filling Corp.
Danville, Ill.
Eveready Pressurized Products
Cleveland, Ohio
Fluid Chemical Company, Inc.
Newark, N.J.
Fuld Brothers Inc.
Baltimore, Md.
La Maur, Inc.
Minneapolis, Minn.
Larsons Laboratories
Erie, Pa.
National Spray Can Filling Corp.
Brooklyn, N.Y.
Old Empire, Inc.
Newark, N.J.
Peterson Filling and Packaging Co.
Danville, Ill.
Powr-Pak Inc.
Bridgeport, Conn.
Purlton Distributors Co.
Boston, Mass.
Regal Chemical Corp.
Brooklyn, N.Y.
Eugene Rose Company
Chicago, Illinois
John C. Stalfort and Sons
Baltimore, Md.
Sun-Lac Inc.
Newark, N.J.
Texas Aerosols, Inc.
Houston, Texas
Thomassen of Pa., Inc.
Norristown, Pa.
Western Filling Corp.
Los Angeles, Cal.

ISOTRON—The Key to Modern Living

can Chemical Society. One important point made in the article is the fact that exact relationships between repellency and chemical structure have not yet been clearly defined.

"In the case of insect repellents, some researchers believe there is a common peak in the infrared absorption spectra of most successful mosquito repellents. Others grant that such a correlation between infrared data and biological activity would indeed be significant, but they do not believe the evidence supports such a conclusion.

"Repellents may work by way of specialized chemoreceptors. Though some sort of interaction between insect and chemical must exist, the physiology of chemoreceptors needs much more study before any reasonable hypothesis can be reached. In the case of animal repellents it may be merely bad taste or smell that makes the materials literally repulsive."

The article declares that USDA scientists take a "rather dim view" of most insect repellents used for livestock. "USDA is seeking formulations that will last longer than the day or two it finds present repellents to be effective. None has been found superior to its standard pyrethrum recommendations. These are said to provide highly effective protection for a day or two under severe insect conditions, partial protection for three or four days where insect populations are light."

Turning to the question of potential insect repellent markets, the article declares that few experts dispute that it is enormous. "Monsanto quotes industry estimates of $500 million at the manufacturers' level. USDA figures that a really effective insect repellent for cattle would sell five or ten times as much as all present materials combined. Also, USDA feels more 'inclusive' formulations could treble the present market, and calls this the 'cheapest kind of insurance policy' for any future planting programs—crops, to range grass, to forest trees."

In conclusion, the article brings up possible uses of repellents on growing plants. "Among interesting new repellents, four-way formulations are now in the hands of foresters. Developed by Wildlife Research Laboratories these protect against fungi, insects, rodents, and birds."

•

CORROSION factors that commonly effect aluminum used with food and chemicals is the subject of a new booklet published by Northern Aluminum Co., Ltd., London WC 2, England. Called "Aluminum with Food and Chemicals", the booklet goes into considerable detail about the various causes and preventatives against aluminum corrosion. Some brief excerpts from the booklet are reported in the Feb. 1 issue of *Chemical Age*, English periodical:

"Halogens, salts of heavy metals, and atmospheres laden with corrosive substances can cause pitting of the surface of aluminum. In one respect this is said to be more serious than uniform surface attack because a comparatively small amount of local action can cause perforation. On the other hand, the rate of penetration usually slows down with increasing depth and pitting is therefore not always as dangerous as would appear at first, especially on thick material.

"Where the attacking agent dissolves the oxide film, a general attack of the whole surface may take place, usually resulting in a uniform surface deterioration. Since the rate tends to be uniform it is possible to predict the life of a container.

. . . "Crevice corrosion is best eliminated by a smooth interior finish for vessels of all kinds. Attack tends to be accelerated at crevices between two parts of the same metal as well as at those between two dissimilar metals.

"A variety of processes are available for protecting aluminum. For example, the natural oxide film can be thickened by immersing the metal in various solutions, Electrochemical processes can also be used to thicken the oxide film. This process, known as anodising, is normally more expensive than chemical treatments.

"Aluminum alloys can be protected by cladding, in which the alloy is covered by a layer of pure aluminum which has a much greater corrosion resistance. Lacquering with epoxy, alkyd, vinyl and phenolic resins is also possible and the metal can be painted if the preparatory procedure is carried out first. . . . Corrosion inhibitors have also been employed successfully, although care must be taken in their application."

•

A WARNING about plastic coating of glass bottles is voiced in the January issue of the British trade publication *Packaging*, by John H. Briston in the second of a series of articles on aerosols. Though primarily a general discussion on the various propellant systems, propellants, valves, and containers, the article goes into some detail on the controversial subject of glass:

"Factors to be taken into account when coating bottles include the provision of adequate plastic under the aluminum mounting cup holding the valve, and keeping as constant a thickness as possible round the corner formed by the side-wall and base of the bottle. Failure to observe the first requirement may lead to breakage at the neck of the bottle, with subsequent violent expulsion of the whole valve assembly. If the second point is neglected, the plastic coating may split at the corner when breakage of the bottle occurs—thus giving a rocket effect as the vapor escapes very rapidly. Drawing on personal experience, I once saw a small bottle propelled nearly 50 feet after such a breakage."

". . . The plastic coating of bottles (with polyvinyl chloride) is already being carried out in this country, and thicknesses of about 25/1000ths of an inch have been found to give adequate protection (provided that the valve is securely anchored). Apart from providing a cushioning effect, and thus reducing the incidence of breakage, the glass fragments are retained by the plastic envelope. A few pinholes or similar ventilation are usually provided in the plastic so that the vapor may escape before the pressure builds up and ruptures the plastic

(*Continued on Page* 67)

Another "first" for Fairfield...

MIGHTY MIDGET AEROSOLS

Clothing, luggage and sports equipment, courtesy Abercrombie & Fitch Co.

Now you can offer your customers a 2-oz. bomb that will do the work of a regular 12-oz. aerosol. It will cover the same area, too—because each particle of spray is 6 times more potent . . . in knockdown . . . and in kill.

The valve is metered to release 100 mg. of spray each time it is activated. This insures proper application, neither too much spray nor too little.

Although "mighty midgets" represent higher concentrations, they cost less than conventional aerosols of equal killing power. They exhibit no greater staining characteristics either. The reason is obvious: the single active ingredient is Improved Pyrenone*. And, of course, when used as directed Pyrenone is *nontoxic*.

These miniature bombs will find many uses at the consumer level . . . in the home . . . and away from home. They'll point the way to new markets, bigger profits.

And remember, "mighty midgets" not only save metal and freon, but they save shelf space, too—cut way down on shipping costs.

Write Fairfield Chemical Division, Food Machinery and Chemical Corporation, 441 Lexington Avenue, New York 17. Branches in principal cities. In Canada: Natural Products Corporation, Toronto and Montreal.

*Reg. U. S. Pat. Off., FMC

Improved **Pyrenone**

Putting Ideas to Work

Fairfield Chemical Division

fmc FOOD MACHINERY AND CHEMICAL CORPORATION

General Sales Offices

441 LEXINGTON AVENUE, NEW YORK 17, N. Y.

NEWS of Pressure Packaging

Terry Joins Boyle-Midway

Daniel H. Terry has joined Boyle-Midway, a division of American Home Products Corp., New York, as

Daniel H. Terry

assistant to the director of research, Jack T. Hohnstine, according to a company announcement issued early last month. Dr. Terry had been vice-president in charge of research of the Bon Ami Co., New York, and is credited with being the developer of "Jet Spray Bon Ami", first successful pressurized window cleaner.

Dr. Terry comes to Boyle-Midway with a background of extensive laboratory, product, development, and production experience with several other companies, including DuPont and General Aniline & Film Corp. He will work at the Cranford, N. J. plant of Boyle-Midway, which is one of the largest private label aerosol manufacturers and marketers in the country.

An officer for several years of both CSMA and the Association of American Soap & Glycerine Producers, Dr. Terry is also a member of the American Chemical Society, the American Association of Textile Chemists and Colorists, American Oil Chemist's Society, and the American Institute of Chemists.

He is the author of many articles and technical papers on such phases of his work as aerosols, soaps, sanitary chemicals, surfactants, and dyes. He is a graduate of Randolph-Macon College, with a Ph.D. in organic chemistry from the University of Virginia.

•

Alfred Martin Dies

Alfred Martin, president and founder of West Penn Manufacturing & Supply Corp., a major supplier of aerosol cover caps, died Jan. 22. He founded the company with his son A. C. Martin in 1931, and served as president until his death.

Mr. Martin began his business career in 1915, when he joined the C. L. Flaccus Glass Co., pioneers in machine-made bottles. He served with that company until 1928, rising to the position of vice-president and manager. In that year the Flaccus company voluntarily liquidated its business.

West Penn was founded originally to specialize in the production of metal screw caps for glass containers, and more recently began devoting much of its production to aerosol cover caps. Mr. Martin, Sr. was active in industrial and banking circles for many years, and founded the Alleghany Valley Trust Co. of Verona, Pa. He served as president of the bank for 33 years, until his death.

•

Crown Moves N. Y. Office

The New York office of Crown Cork & Seal Co., Baltimore, has been moved to Coliseum Towers, 10 Columbus Circle, New York 19. Telephone number of the new office is Circle 5-3200. All sales representatives and office personnel formerly located at 60 East 42nd Street will be at the new office, though warehousing facilities will continue to be at Bush Terminal, Brooklyn.

Babbitt Appoints Mera

B. T. Babbitt, Inc., New York manufacturers of household cleansers, has announced the appointment of John T. Mera as controller. Formerly controller of the S. H. Pomeroy Co., he is an active member of the Controllers Institute of America and the National Association of Cost Accountants. Mr. Mera will be in complete charge of all accounting and general office functions.

•

Kelly to DuPont Post

William F. Kelly, for the last two and a half years sales correspondent in the Eastern district office of the Du Pont Company's "Freon" Products Division, has been named office manager for that division in New York City.

•

Cooper Forms New Company

Franklin H. Cooper, formerly of Connecticut Chemical Research Corp. and Standard Aromatics, Inc., has announced the formation of Embassy Laboratories, a new company devoted to private label manufacture and filling of cosmetics, perfumes, and related items. The new company has headquarters at 125 Fifth Avenue, New York City.

In addition to formulating and manufacturing, Embassy Laboratories will assist firms launching new products to find the proper component parts, packaging, labeling and other designing elements necessary in the cosmetic industry. Drop-shipping and billing facilities will also be available where desired.

Mr. Cooper joined Connecticut Chemical in 1955 as quality control chemist working extensively with aerosols, and in 1956 joined Standard Aromatics as technical service director specializing in the application of perfumes to aerosols and other cosmetics. "In addition to handling large runs on automatic filling equipment," Mr. Cooper stated, "Embassy Laboratories will have facilities to service smaller companies, as well as large firms requiring experimental runs."

Dingfelder Joins Reynaud

Adolph Dingfelder last month joined Reynaud, Ltd., New York, manufacturers of aromatic chemicals, essential oils, perfume specialties, compounds, and industrial deodorants, as vice-president in charge of sales.

Mr. Dingfelder had been director of exports and general sales manager of Felton Chemical Co., Brooklyn. His sales activities for Reynaud will cover domestic as well as foreign markets.

•

Colgate Earnings Rise

The consolidated earnings of Colgate-Palmolive Co., New York, for the year 1957 amounted to $19,930,000, or $7.81 per share of common stock, the company announced last month. This compares with consolidated earnings of $15,477,000 or $6.04 per share in 1956.

In recent years, Colgate has reported only domestic earnings plus dividends received from foreign subsidiaries in U. S. dollars. It was explained that, by consolidation, the full significance of the company's world-wide business will now be reflected in published reports. On the previous basis of reporting, domestic earnings and dividends received amounted to $14,419,000 in 1957 as against $10,518,000 reported for 1956.

World-wide sales for 1957 totaled $506,910,000 as compared with $508,523,000 in 1956. Domestic sales were lower than in the preceding year (due in part to the termination of the company's contract with Chesebrough-Ponds, Inc., covering distribution of Vaseline products), while foreign sales climbed to a new record. A full report on Colgate's 1957 operations will be released later.

•

SCC Lists Ladies' Night

The New York Chapter of the Society of Cosmetic Chemists has announced plans for a ladies' night dinner for its meeting of April 1, 1958 at the Park Avenue Brass Rail Restaurant, New York.

George Kachajian, chairman of the committee in charge of arranging this annual event, announced last month that plans are being formulated to make this a most colorful and enjoyable affair. It will feature a special program of particular interest to the ladies. Details will be announced shortly.

•

Attorneys Change Firm Name

Lancaster, Allwine & Rommel, patent and trademark attorneys of Washington, D.C., last month changed their firm name to Rommel, Allwine & Rommel, as a result of the retirement of C. Everett Lancaster, a senior partner.

The remaining members, E. Ernest Allwine and Royal R. Rommel, entered into a new partnership with John M. Rommel, who had been associated with the old firm since 1950. Oscar E. Lancaster, who was with the old firm for 25 years, was named office associate.

•

Grace Completes Research Ctr.

The Polychemicals Division of W. R. Grace & Co., New York, has announced completion of two separate installations—the first building of its $5 million Washington Research Center (located at Clarksville, Md.) and the dedication of a new low-pressure polyethylene plant at Baton Rouge, La.

The research center will be directed by William P. Gage, president of Grace Research & Development Division, and will employ more than 160 chemists, physicists, and technicians. The $20 million Baton Rouge plant, which actually went into production last November, will have an expected annual capacity of 50 million pounds.

•

Crouch Marks 25th Year

Stanley Crouch, manager of the Los Angeles office of Fritzsche Brothers, Inc., New York, celebrated his 25th anniversary on Feb. 11 at a private dinner party given him by the company in Los Angeles. He was presented with a Government bond from the officers and directors, and an engrossed scroll in recognition of his elevation to membership in the Fritzsche "Quarter-of-a-Century Club", which to date has taken in a total of 71 employees.

Russell Stoddard Retires

Russell B. Stoddard, formerly manager of the Fairfield Chemical Division of Food Machinery and Chemical

Russell B. Stoddard

Corp., New York, last month retired from active service. He will serve FMC on a part-time basis as a consultant (in his specialty of pyrethrum chemicals and other pesticide materials) and will also devote himself to outside business interests.

Mr. Stoddard has been a driving force in the insecticide industry for more than 20 years, and is credited with shifting the major source of rotenone root from Malaya and Java to Peru (today's source). He also directed successful research efforts to purify pyrethrum (to meet the increased military need for insecticides in World War II) and also directed the development of aerosols based on purified, concentrated pyrethrum. Also under his direction a new source for pyrethrum flowers was developed in Ecuador.

As a consultant with FMC's chemical divisions, Mr. Stoddard will contribute his broad experience to various phases of the company's insecticide program, including refinements in aerosol applications.

•

Sheehy in New Crown Post

Crown Cork and Seal Co., Baltimore, last month announced the appointment of Daniel F. Sheehy as vice-president and New York regional sales manager. He was formerly president of Daniel F. Sheehy Co. Associates, an automotive and transportation sales concern.

The experience of more than a decade shows that U.S.I. anhydrous (water-free) alcohols help prevent clogging of the valve . . . a fact that takes on more and more importance as competition increases among aerosol products.

Furthermore, U.S.I. specially denatured alcohols contribute to a steady spray rate and promote even particle distribution. This results from their outstanding compatibility with a great variety of concentrates.

Because U.S.I. anhydrous alcohol formulas are free of water, water-corrosion of containers is eliminated as is water-insolubility of aerosol ingredients. They are produced under rigid quality controls that assure uniformity of specifications. Nationwide distribution assures you of prompt service and delivery of tank, drum or 5-gallon quantities.

If you have a specific aerosol problem perhaps a U.S.I. Technical Service representative can help you find a practical and economical solution. Write for technical data and prices.

U.S.I. INDUSTRIAL CHEMICALS CO.
Division of National Distillers and Chemical Corp.
99 Park Ave., New York 16, N. Y.
Branches in principal cities

Aerosols Criticized by Collapsible Tube Makers

The Collapsible Tube Manufacturers Council, New York, last month issued a statement roundly criticizing plastic and aerosol containers, and pointing out the advantages of collapsible tubes. The tube-making industry, though not especially hurt to date by the inroads of aerosol and flexible plastic packages, is apparently looking apprehensively over its shoulder at both these lusty industries, which threaten to substantially cut into tube volume within the next three to five years.

Martin Z. Post, research director of the council, charged that "The user of an aerosol can is stuck with the original size of the can no matter how much of the product has been used—to say nothing of the risk of not even getting all of the product out. As much as one-third of the aerosol can is used to house propellant, not product."

He further claimed that, after having been opened, no other package is as airtight as a fold-up metal tube. (This claim is refuted by aerosol experts, who point out that the very nature of the pressurized package precludes the possibility of air contamination of the product.) Mr. Post declared that tubed products "take up less space, are among the easiest to display on store shelves and counters, and are easiest for consumers to carry around."

He repeatedly stressed the economy factor, pointing out that they are "extra-economical" because they surrender every bit of their contents. "Products in collapsible metal tubes stay fresh for years after being packaged. There is no vapor transmission through the walls of the tubes, no change in product taste or color, and no chance of mixing with unwanted additives."

The statement made major points of the pressure factors, and the necessity of using certain aerosol containers in special positions: "No matter how a tube is held—although it should be squeezed from the bottom—it dispenses in the amount desired at the slightest pressure. Children as well as adults have been using unbreakable, unexplodable metal tubes for years, with no kind of danger. Tubes can be put down on surfaces of any shape. Dropping a tube will not hurt it or its contents."

Mr. Post reported that more than 1,089,000,000 collapsible metal tubes were sold last year, and concluded that "we are confident that fold-up metal tubes will remain the popular convenience, economy, and safety package for a long time to come."

Brief editorial comments on the significance of the council's statement and on the validity of its claims is made on page 74 of this issue.—*The Editor.*

•

Velsicol Appoints Schweiker

As part of a general expansion in research and product development, Velsicol Chemical Corp. last month appointed Dr. George C. Schweiker to the new position of manager of research. Velsicol's director of research, Dr. W. P. Utermohlen, Jr., announced that Dr. Schweiker will be responsible for the basic research programs of the company's research and development department. These will encompass areas of agricultural and industrial chemicals, polymers, organic processes, and other new fields of interest.

Dr. Schweiker comes to Velsicol from Hooker Electrochemical Co., where he served as supervisor of polymer research. Previously, he was an instructor in chemistry at Drexel Institute of Technology in Philadelphia and while teaching at Drexel, received his Ph.D. from Temple University, in 1953. He is a member of the American Chemical Society, Sigma Xi, and the American Association for the Advancement of Science.

•

Guenther Lectures in England

Dr. Ernest Guenther, vice-president and technical director of Fritzsche Brothers, Inc., New York, took off from Idlewild Airport Feb. 9th, for a lecture program to be presented before the British Aromatic Compound Manufacturers' Association in the Assembly Hall of the Royal Empire Society, London, on Feb. 13.

His talk, for which he used colored slides and films, embraced the California citrus industry, peppermint production in Oregon, Mexican lime oil and West Indies nutmeg, ginger, pimenta and citrus production. He also showed films taken during his recently-completed African essential oil survey, dealing with production of the various essential oils originating in these areas.

From England, Dr. Guenther was to visit Belgium, France and Germany, returning to New York in early March.

•

Europeans to Meet in April

Tentative plans for a meeting of European aerosol representatives in mid-April were announced last month by F. H. Hans, temporary secretary of a group moving to set up a European aerosol association. The group, which held its first meeting in October (reported in *Aerosol Age* for December 1957) is studying the feasibility of setting up a full-fledged aerosol organization.

Mr. Hans, German representative for Pegasus Corp., New York, is maintaining a temporary information center for the group at 81 Zeil, Frankfort/M., Germany. The cost of the association would be covered by uniform membership fees, which, for a start, have been recommended at 30 Deutschmarks.

Though the group's working committee has not yet specified the countries from which aerosol firms would be eligible for membership, at a special meeting held Dec. 20 it *was* decided that full membership privileges would be extended to "well established and progressive aerosol companies in Germany and all countries having common borders with Germany. Contacts would be made with other European and overseas countries in the aerosol field." This exclusion of England, Great Britain, Italy, Norway, Sweden, Finland, Portugal, and the European countries from full membership is still under study.

•

Nebraska Co. Formed

Reynolds Distributing Co., a company to "manufacture and sell spray products", has been incorporated in Lincoln, Nebraska, with an initial capital of $25,000. Principals are Robert W. Reynolds, Lloyd E. Barratt, and Hugo F. Srb.

Emulsion Inversion Discussed at SCC Meeting

A LARGE audience of cosmetic chemists and other scientists heard Dr. Paul Becher discuss "The Effect of the Nature of the Emulsifying Agent on Emulsion Inversion" at the monthly meeting of the New York Chapter of the Society of Cosmetic Chemists, held Feb. 5 at New York's Park Avenue Brass Rail Restaurant. Harry Isacoff, chairman of the local chapter, presided and Dr. John Longfellow, program chairman, introduced the guest speaker.

Dr. Becher is project leader in surface chemistry at Atlas Powder Company's Central Research Laboratory. His technical publications include "Principles of Emulsion Technology" (1955) and the recently published A.C.S. monograph, "Emulsions, Theory and Practice."

He pointed out that the classical theories of emulsion inversion fail in practice because they relate the phase volume concentrations at which inversion occurs to purely geometrical considerations and assume that the internal phase consists of uniform, incompressible spheres. Actually, the particle size distribution of the internal phase is very wide, and the droplets frequently are deformed from the spherical. By means of model systems he illustrated how the type and concentration of the emulsifying agent determines the practical concentration of oil phase and water phase at which the emulsion will invert from oil-in-water to water-in-oil or *vice versa*. If such systems are prepared by the "inversion technique," the final internal phase has a finer particle size and the emulsion is more stable.

Dr. Becher described the method he used for establishment, within moderately broad limits, of the range of phase concentrations in which a particular type of emulsion (O/W or W/O) is stable for a given non-ionic emulsifier or combination of emulsifiers. This method employs a simple conductimetric titration to determine the points at which inversion occurs during repeated cycling of the oil-water composition of each emulsion system studied. The hysteresis loops plotted from the data obtained are used to define the regions of phase concentrations in which stable emulsions exist. A discussion period followed.

Dr. John Longfellow, Program Chairman of the New York Chapter has announced that the next meeting on March 5 at the same restaurant will feature a talk by Dr. Donald J. Birmingham of the United States Public Health Service. Dr. Birmingham, who is medical director and chief dermatologist of the Occupational Health Field Headquarters in Cincinnati, will review the various modalities which can be used in the testing of topical applications. Emphasis will be placed on the evaluation of product performance rather than the estimation of potential hazard to the skin.★

•

General Elects Fooshee

Irb H. Fooshee, executive vice-president of General Chemical Co. a division of Allied Chemicals & Dye Corp., New York, has been elected president of the company. He succeeds Chester M. Brown, who became vice-president of Allied Chemical.

Mr. Fooshee was named executive vice-president of General last July after three years as vice-president in charge of development.

•

House Gets Fair Trade Act

A new fair trade act has been introduced in the house of Representatives by Rep. Oren Harris (D., Ark.) to offset a parade of state court decisions against state fair trade laws. The Federal law is aimed at goods traded in interstate commerce, and has been referred to the House Interstate Commerce Committee for consideration.

The new bill was proposed by the National Association of Retail Druggists, which has 37,000 members. The term "fair trade" refers to the maintenance of prices set by manufacturers, and is designed to prevent price wars or price cutting by retail merchants. The new Federal law would apply only to "identified merchandise" (goods bearing a trademark or brand names) and would make it illegal for a retailer to cut the manufacturer's price if the manufacturer gave sufficient notice of his policy.

Fair trade laws are applied to various brand-name aerosol products, including shave creams, hair sprays, and insecticides.

•

Dunaway Denies FTC Charge

Judson Dunaway Corp., Dover, New Hampshire, recently denied a charge by the Federal Trade Commission of discriminating among its customers in the granting of promotional allowances. The company markets "Bug-a-Boo" and "Expello" aerosol insecticides.

Judson Dunaway denied the specific charge that it paid the Grand Union Corp., a major eastern supermarket chain, allowances which were not made available to the chain's competitors on proportionally equal terms. The company also denied paying substantial sums to the supermarket chain for having its products advertised on Grand Union's animated sign at Times Square, New York; and further denied payments covered in-store promotional displays.

Judson Dunaway admits advertising on the sign but asserts rental was paid to an advertising agency and not to the chain.

The FTC complaint had alleged that Grand Union agreed with Judson Dunaway not to handle or sell competitive products. This charge was also denied, the aerosol company claiming that it must "compete with similar products of a competitor or competitors" in the chain's retail outlets.

•

Velsicol Names Schulz

Kenneth L. Schulz has been appointed technical sales representative for Indiana and Illinois by Velsicol Chemical Corp., Chicago. He joined the company's Agricultural Chemicals Division and will be responsible for sales of the company's line of insecticides and solvents from his headquarters in Lincoln, Ill.

Government Authority Minimizes DDT Danger

CHARGES that DDT sprays might contribute toward increases in leukemia, Hodgkins Disease, and aplastic anemia were refuted last month by Dr. Wayland J. Hayes, chief of the Toxicology Division, U. S. Public Health Service. He testified in the United States District Court, Brooklyn, N. Y., in a case in which 14 Long Island residents are seeking a permanent injunction against further aerial spraying on Long Island by government agencies. The USDA is the chief defendant in the suit.

Dr. Hayes reported on two separate experiments in which prison inmates were subjected to "massive" dossages of DDT and suffered no ill effects. He said they were given 200 times the normal amounts of DDT that might be injected by humans, and that they had demonstrated no serious physiological effects.

A blood specialist from the Mayo Clinic had earlier declared that DDT sprays might be contributing toward the recent increase in leukemia, Hodgkins disease, and aplastic anemia. Dr. Malcolm M. Hargraves, an authority on the subject of blood diseases, made the statement.

DDT and other chlorinated hydrocarbon pesticide compounds (which Dr. Hargraves also mentioned) are important ingredients in the majority of aerosol insecticides. He declared that the margin of human tolerance for DDT was narrowing in much the same manner as human tolerance for atomic radiation. The increase in leukemia and Hodgkins Disease is also blamed (by Columbia University researchers) on the startling increase in the strontium content in human bone marrow (which manufactures and restores blood to the body). This is due to radiation build-up in the atmosphere.

Dr. Hargraves emphasized that, in his testimony, he was speaking for himself and not the Mayo Clinic. He declared that all of the 200 patients he has treated during the past two years for leukemia, Hodgkins disease and aplastic anemia had all been directly exposed to DDT or similar pesticides and their solvents. He reported that most of these patients had recovered, but that several died.

•

Reynolds Names L. R. Payton

Reynolds Metals Co., Richmond, Va., a major aluminum producer, recently established a Rigid-Container Division to handle the marketing and promotion of the company's aluminum containers. L. R. Payton will head the division, which will be located at the company's Richmond office.

•

Revlon's Earnings Climb

Revlon, Inc., New York cosmetic manufacturer and marketer (and a leading marketer of aerosol hair sprays and colognes) recorded a 7.5% increase in earnings for 1957, on a sales gain of 11% over 1956. Charles Revson, company president, who reported the gains, said the results set a record high for Revlon.

Net sales for 1957 were $95,174,546, compared with $85,767,651 the year before. Net earnings last year were $8,999,337 against $8,375,502 for 1956.

•

Tuttas in New Crown Post

S. V. Tuttas, director of sales of Crown Cork & Seal Co., Baltimore, has been elected vice-president. He has held the post of director of sales since January, 1957.

A native of Wisconsin, Mr. Tuttas joined Crown in 1950 as Milwaukee sales representative for the Crown & Closure Division. He was later promoted to the post of Chicago district sales manager, and in 1955 became division manager of sales for the Crown & Closure Division.

He will make his headquarters in Philadelphia.

•

Breck Named Director

Edward J. Breck, president of John H. Breck Inc., was recently appointed a Director of the Valley Bank and Trust Co. of Springfield (Mass.). He was also selected to the bank's eight man Executive Board.

•

Krylon's Advertising Program

An accelerated spring market promotion and advertising campaign which will launch Krylon's tenth anniversary as the world's largest manufacturer of aerosol spray enamels, has been announced by Richard C. Newbold, vice-president — Sales, Krylon, Inc., at the company's 1958 sales meetings held in New York, Chicago and San Francisco.

Krylon will stage intensive local market promotions in twenty leading cities throughout the country, supported by heavy newspaper advertising in these areas. In addition, local jobbers and dealers will be supplied with newly designed sales promotion materials and will take an active part in Krylon's promotion activities.

National consumer and trade advertising will back local campaigns. Krylon will again advertise in *Life* magazine, stressing a "spruce up with Krylon" theme. Greatly expanded trade advertising in the hardware-paint, automotive, art, and radio and TV fields will back up the consumer campaign.

Krylon Executives Meet to Approve Campaign

Executives of Krylon, Inc., Norristown, Pa., recently held a sales meeting for its Eastern and Canadian sales representatives to examine new sales promotion materials. From left to right are Elmore E. Kayser, advertising and promotion manager; James W. Bampton, president; Richard C. Newbold, vice-president — sales; and Brenton T. Morse, vice-president and treasurer. Similar meetings were also held in Chicago and San Francisco.

Why Du Pont's Versatile 90% Methoxychlor (OIL CONCENTRATE) Should be Included in Your Aerosol and Oil Spray Insecticide Formulations

1. When methoxychlor is combined with pyrethrins and piperonyl butoxide, the result is fast knockdown and high kill! This combination is extremely effective against flying insects and is also a potent contact killer of crawling insects.

2. Methoxychlor in combination with allethrins, synergist 264 and isothiocyanates contributes fast action with good middle and late knockdown plus high kill. These combinations give effectiveness and economy!

3. Methoxychlor, when added to synergised pyrethrins, extends activity against garden insects.

4. Now, with the discovery of a new property, methoxychlor is actively synergized by Sesoxane. This combination alone or with other knockdown agents will extend activity still further against roaches and ants, granary insects, black carpet beetles and even aphids and mites.

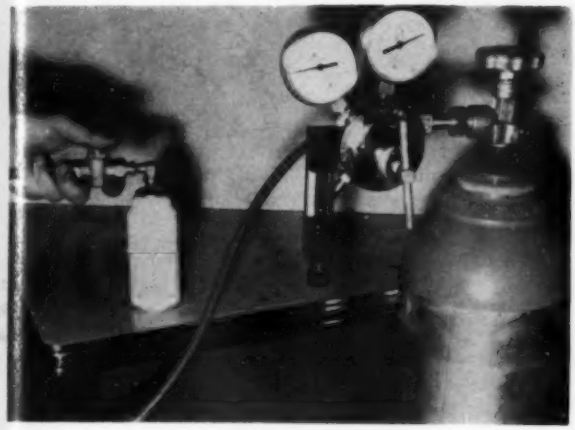
We would like to discuss your formulation plans with you. Write the Du Pont Grasselli District Office nearest you.

Palo Alto, California.....701 Welch Road
Atlanta 8, Georgia.....739 W. Peachtree St.
Minneapolis 2, Minnesota.....1207 Foshay Tower
Cleveland 14, Ohio.....1321 Nat'l City Bank Bldg.
Wynnewood (Philadelphia), Pa. . .308 E. Lancaster Ave.
Houston 25, Texas.....1100 E. Holcombe Blvd.

DU PONT
REG. U.S. PAT. OFF.
BETTER THINGS FOR BETTER LIVING
. . . THROUGH CHEMISTRY

Equipment— Processes— Bulletins—

Builders Sheet Metal Announces Nitrogen Filling Unit



Builder's Sheet Metal Works, Inc., New York, last month announced a laboratory-type nitrogen filling system. The hand operated unit, which has a production rate of approximately ten-per-minute, includes a nitrogen cylinder, pressure reducer, a combination bottle and can capper, a water bath, and various gauges and control valves.

Aerosols for Cancer Research

An aerosol sulphur dioxide spray is currently being used to detect cancer at Johns Hopkins University School of Medicine. The spray is used to induce coughing in a category of patients called "noncoughers"—persons who normally are unable to voluntarily produce sputum by spontaneous coughing.

Researchers at Johns Hopkins reported that in tests on 60 of these noncoughers, 19 patients were found to have malignant lung cells. The sulphur dioxide irritates the inner surfaces of the lungs, causing the patients to secrete sputum almost immediately. Cancer cells, if present, are then detected by means of a microscope.

The new technique was reported publicly last month by the Maryland Division of the American Cancer Society. It was developed by a Johns Hopkins team of two doctors and two physicians — Dr. Warde B. Allan, associate professor of medicine; Dr. Phillip Whittlesey, Luly M. Haroutunian, and Elizabeth B. Kelley.

The project was aimed at finding and earlier diagnosis of lung cancer. Dr. Whittlesey pointed out that the aerosol method is only a diagnostic aid, but that it is tremendously valuable in that it enables researchers to find malignancies earlier in their growth — before there are any other recognizable symptoms.

•

Aerosol Paint Valve

A new spatter-head paint valve has been announced by Newman-Green, Inc., aerosol valve manufacturer located in Addison, Ill.

The new spray head (based on the basic valve unit which is the same in all Newman-Green designed products) gives a spattered or speckled pattern to finished paint jobs. The spatter-head can be used for paint products to give unique patterns.

"It is ideal for home decorators who like to produce unusual and attractive spatter patterns in painting lamp bases, whatnot shelves, flower boxes, etc.", states Edward Green, president of the company. "Valve operation is trouble-free and gives excellent end results," he added.

Further information or actual samples for testing can be obtained by writing directly to Newman-Green, at 151 Interstate Road, Addison.

New Hair Spray Polymer

A new polymer for hair sprays has been announced by the research department of Sun-Lac Inc., Newark, N. J. custom filler. This ingredient, a new development, is reported to provide better manageability, better compatibility with perfumes, and be cheaper than principal materials now being used for aerosol hair sprays.

This economy factor is said to stem not only from the low cost of manufacture of the basic material, but also from the fact that less perfume would be necessary when used with the new polymer in hair sprays.

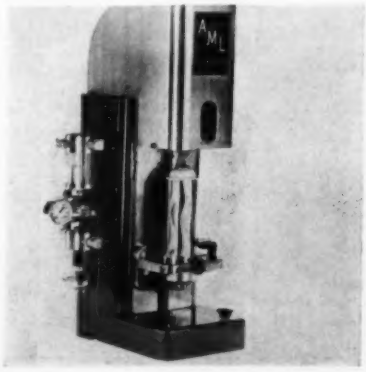
Sun-Lac is at present concluding extensive testing of hair sprays containing the new substance. Eight months of stability and normal shelf testing have already been completed, and national market and consumer tests are also being concluded.

The company offers samples of basic hair spray formulations with the polymer, or will offer its laboratory services to develop customer formulations containing the new material. Further information can be obtained by writing directly to the company at 274 Lafayette Street, Newark 5, N. J.

•

New Laboratory Crimper

An air-operated laboratory crimper, called the "Pneumati-Crimp," was introduced late last month by Aero-Matic Laboratories, Yonkers, N. Y. It uses a standard high production crimping head with a floating can platform for use with different size containers. The sturdy unit is reported to be ideal for small production or experimental runs; and can be finger-tip or foot operated. Further information can be had by writing to the company at 483 Nepperhan Ave., Yonkers.



Give your product a better break with

OEL AEROSOL VALVES

Functionally as well as esthetically, OEL Aerosol Valves are highly qualified to increase customer goodwill for the products they dispense. This happy result is attained by ingenious design, efficient manufacturing, and careful final inspection. Consider these important points:

Equally effective in cold or pressure filling • Fast Loading • Minimum propellent loss in pressure filling • Safe with inflammable materials • Esthetic appearance • Adapts to wider range of dispensing requirements with minimum change.

The OEL Valve is now adaptable for products pressurized with nitrogen.

OEL THE *BETTER* AEROSOL VALVE

WRITE OR TELEPHONE FOR COMPLETE INFORMATION AND SAMPLES

OIL EQUIPMENT LABORATORIES, INC.

600 PEARL STREET ELIZABETH, NEW JERSEY

NOW YOU CAN IMPROVE YOUR PACKAGING WITH...

BUILDERS NEW INERT GAS FILLING SYSTEM

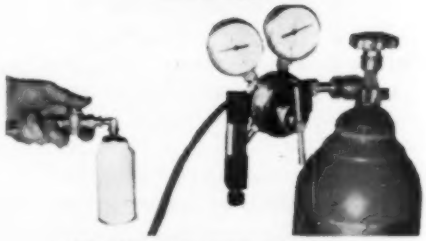
Builders outstanding & easy to operate system dispenses products such as toothpaste, shaving cream, beauty cream, adhesives, food products or any other viscous type liquid.

BUILDERS INERT GAS FILLING SYSTEM FEATURES:

- **Dispenses Gentle Flow**
- **Insures Smooth, Uniform Dispensing**
- **No Mess — No Waste**
- **Permits Uniform Gassing**
- **Production Rate of approximately 10 per minute.**

3 Easy Steps to Better Filling:

1) **Fill your Product**
2) **Cap Can**
3) **Pressurize**



BUILDERS SHEET METAL WORKS Inc. manufactures a complete line of AEROSOL LABORATORY EQUIPMENT. Also, BUILDERS will manufacture to your own specifications any job connected with metal work for the Aerosol Field.

Additional Information Will be Mailed on Request.

BUILDERS

CAnal 6-5390 CAnal 6-5398

SHEET METAL WORKS, Inc.

108 WOOSTER STREET NEW YORK 12, N. Y.

Extruded Plastics Booklet

A 12-page, 1958 edition of "Extruded Plastics" has been published by Anchor Plastics Co., Long Island City 6, N. Y.

The illustrated brochure includes the latest information on complex shapes, rods, tubes, and moldings. It describes fabricated parts, discusses thermoplastic materials suitable for extrusion, and gives material property tables. The application of extruded parts in several industrial and consumer products is also shown. There are special sections devoted to aerosol dip tubing, "T" moldings, and the newly developed plastic extrusions which simulate the appearance of polished brass, chrome, copper or gold.

A complimentary copy may be obtained by writing to the company at 36-36 36th Street, Long Island City 6.

•

D & O Repellent Odors

Just released from the Dodge & Olcott products development laboratories is a series of eight new perfume compounds designed specifically for use in the new sunscreen/insect repellents. Including floral spice, four other spices, centifole, violet and bouquet, these compounds are reported to have been thoroughly tested in both spray and foam type aerosol formulations as well as in conventional lotions. Samples, formulas and specific information are available upon request to Dodge & Olcott, Inc., 180 Varick St., New York 14.

•

Electric Aerosol Sprayer

A new electrical device for the spray application of disinfectants, insecticides, deodorizers, etc., has been announced by Nisto GmbH., Vienna, Austria. The device, wihch operates on a connection of DC or AC 110 or 220 volts, has a maximum atomizing capacity of 10 liters per hour.

Called the "Nisto Formulsin Machine," it makes possible the adjustment of the droplet size, from 0.001 mm (smoke) to 0.01 mm (fog) to 0.06 mm (spray). For reasons of safety the device is made of plastic, and all parts coming into contact with the liquid are made of stainless steel. The manufacturer sees widespread use of the machine in hospitals and other institutions, ship fumigation, dairies, nurseries, etc.

•

DuPont Food Propellant

E. I. du Pont de Nemours & Co., Wilmington, recently announced that a new propellant designed specifically for pressurized food products will shortly be available in research quantities. Toxicological evaluation for FDA sanction of the propellant is expected to be completed later this year.

Called "Freon-C 318," the propellant is actually octafluorocyclobutane. It is said to exhibit a high degree of stability, and has given no evidence of deterioration under rigorous storage conditions and in acid or alkaline systems. It has a low water, a low acid solubility, and exhibits characteristics similar to those of conventional fluorinated hydrocarbon propellants. Because of this it is expected to be adaptable for use in conventionally designed dispensing equipment.

•

CSMA Prices OT Aerosol

The Chemical Specialties Manufacturers Association recently issued a price list that included the Official Test Aerosol (OTA) Insecticide 1955-60. Packed in six 12-ounce aerosols to a carton, the per-carton price to CSMA members is $18, and to nonmembers $24. Both prices are F.O.B. New York, and express collect, since the cartons cannot be mailed.

Orders for export are F.O.B. New York for delivery to forwarder in the U. S. Packing, fees, or special charges are billed to the purchaser.

•

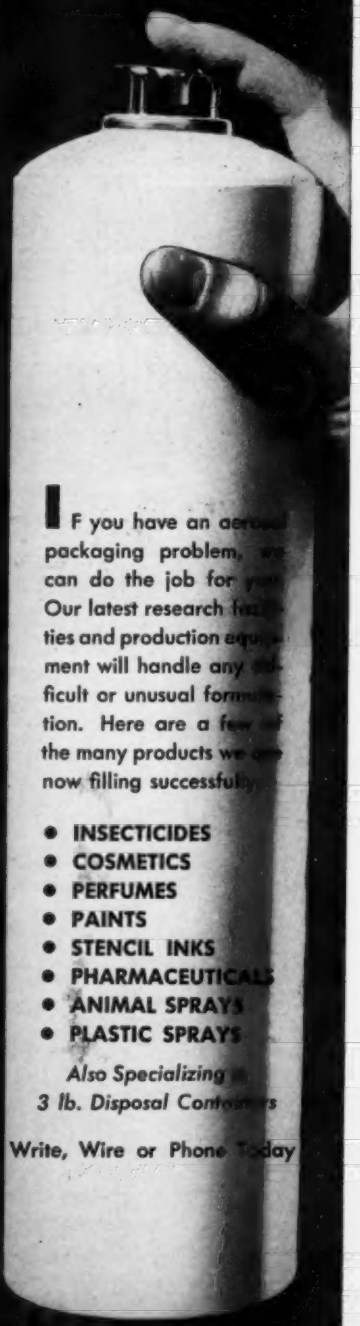
New Vinyl Chloride Plant

Monsanto Chemical Co., St. Louis, has announced that it will probably co-sponsor the construction of a new vinyl chloride plant with Cardometal SAIC, leading Argentine producer of calcium carbide and ferroalloys. The plant will be located at Mendoza, Argentina.

Vinyl chloride is used extensively as an aerosol propellant in Europe, South America, and in Japan.

Specialists in Small Run

AEROSOL PACKAGING



IF you have an aerosol packaging problem, we can do the job for you. Our latest research facilities and production equipment will handle any difficult or unusual formulation. Here are a few of the many products we are now filling successfully:

- INSECTICIDES
- COSMETICS
- PERFUMES
- PAINTS
- STENCIL INKS
- PHARMACEUTICALS
- ANIMAL SPRAYS
- PLASTIC SPRAYS

Also Specializing in 3 lb. Disposal Containers

Write, Wire or Phone Today

NATIONAL SPRAY CAN FILLING CORP

1238 EAST 14th STREET
BROOKLYN, N. Y.

Phone Cloverdale 2-2730

Alpine Technical Notes

Alpine Aromatics, Inc., Metuchen, N. J. perfuming compound supplier, has begun publishing a series of "Technical Notes", excerpts of interesting ideas in current literature discovered by Alpine's research staff. For each item in the notes, which is identified by a key number, the company will provide additional data on request.

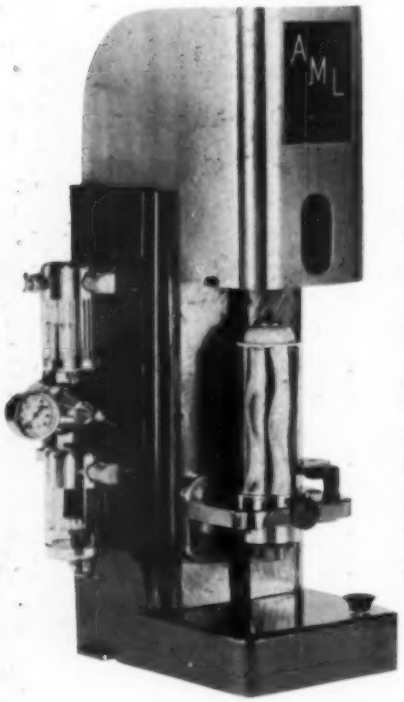
Among the items reported on in the January issue of "Technical Notes" are the use of dimethylhydantoin formaldehyde resin as a substitute for PVP in aerosol hair sprays, use of malonic acid to inhibit human perspiration, and a number of other recent cosmetic and perfuming developments.

•

New Rhodia Flavors

A variety of imitation fruit flavors, under the name "Rhodiaroma", has been introduced by Rhodia, Inc., New York. Recently Rhodia also introduced two new chocolate and coffee aroma enhancers.

Aero-Matic Labs.
"PNEUMATI-CRIMP"



AIR OPERATED LAB. CRIMPER

FAST SETTING

FINGER-TIP OR FOOT OPERATED

IDEAL FOR SMALL RUNS

FLOATING CAN PLATFORM

INTEGRAL LUBRO-CONTROL UNIT

USES STD. HIGH PROD. CRIMP. HEAD

ENGINEERED FOR LONG LIFE

QUALITY COMPONENTS THROUGHOUT

We have been prompted by a number of custom aerosol fillers to design an air operated can crimper, one which could be used for small runs as well as for laboratory use. It should be fast setting for all sizes of cans, without removing screws etc. Easy to operate, merely by finger-tip or foot. Controls, gage and lubrication should be in a convenient location. It should be well designed and constructed with quality components throughout . . . We are proud to introduce a unit which fits all these requirements and more . . . the A. M. L. "PNEUMATI-CRIMP."

Aero-Matic Laboratories Corp.
483 NEPPERHAN AVENUE YONKERS, N. Y.
GREENLEAF 6-2542

Brochure on Food Gases

A new 24-page brochure covering the important jobs industrial gases are doing for the food industry has just been made available by Air Reduction Co., New York, producer of carbon dioxide, nitrous oxide, and other gases used in aerosol food packaging.

Entitled "Facts on Gases Used for Food Products," the brochure describes what a gas can do—blanketing, pressure packaging, quick freezing, and chemical processing. In addition, information is provided on sources and properties of gases, the problem of selecting a gas, plus the delivery, storage and handling techniques.

There is also a section on Airco's laboratory projects in food-industry technology and a concise listing of supply sources of Airco gases. A copy of the brochure may be obtained by writing the company at 150 East 42nd Street, New York 17, New York.

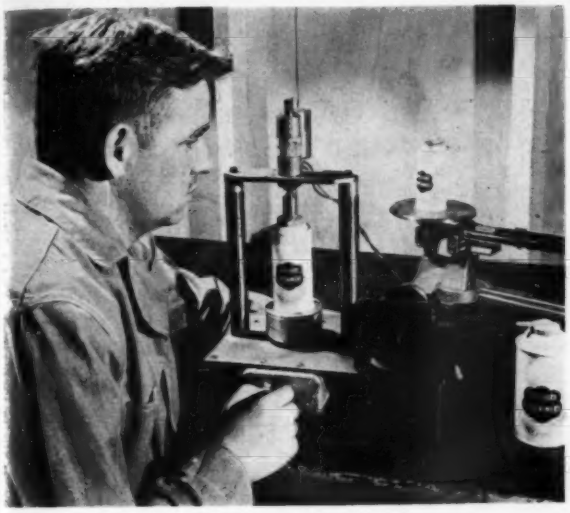
•

Hoechst Aerosol Booklet

Farbwerke Hoechst AG, Frankfurt, Germany, a major European producer of fluorinated hydrocarbon propellants, recently issued a 56-page illustrated booklet on aerosol packaging. Printed in German, the booklet describes in detail the characteristics and performance of Hoechst's propellant, "Frigen," and its application in a variety of different aerosol product types.

Included are sample formulations for insecticides, room deodorants, hair lacquers, shampoos, paints, and a variety of other products. Copies of the booklet may be obtained by writing directly to Farbwerke Hoechst AG, Frankfurt (M), Hoechst, Germany.

Sun Tube Unveils New Automatic Timing Device



Sun Tube's automatic timer accurately controls aerosol can discharge for predetermined periods up to 30 seconds. Discharge rate test, performed here by Sun Tube technician James Murray, is subject to later check on more sensitive scales.

An automatic timing device designed and built by Sun Tube Corp., Hillside, N. J., said to eliminate completely the possibility of human error in testing discharge rates of aerosol products.

Believed to be the first of its kind in the industry, the device accurately controls discharge for any predetermined period from one to 30 seconds. It is used in daily tests at the American Can subsidiary's Hillside, N. J. laboratories. Previous testing methods, employing a stop watch, were subject to variations in the operator's reaction time.

Sun Tube, aerosol valve manufacturer performs rate of discharge tests as part of its program to improve and extend the product applications of aerosol valves. The laboratory studies have amassed data on valve performance and the relationship of various valve components to ideal dispensing conditions. Discharge rate tests also serve as an accurate guide to the useful life of aerosol containers.

As a service to the entire aerosol industry, Sun will make available drawings of its automatic timing device upon request, according to Kenneth M. Leghorn, Sun Tube president.

•

Multiple Packaging Booklet

The story of multiple packaging, its advantages to the packer, retailer and consumer and its vital role in today's merchandising picture are outlined in a free booklet called, "Off to the Races with Multi-Pack," being made available by the Gair Boxboard and Folding Carton Division of Continental Can Co., New York.

The illustrated booklet, divided into two sections, also contains information on Continental's hand-loaded "Can-Trak", machine-loaded "Jak-Et-Pak" and soft drink carry cartons, rounded out with sales success stories of a wide range of products offered through multi-packs. The booklet may be obtained by writing Multi-Pack Booklet, Boxboard and Folding Carton Division, Continental Can, 530 Fifth Avenue, New York 36.

•

Aluminum Corrosion Booklet

"Aluminum with Food and Chemicals", a new booklet discussing the forms of chemical attack to which aluminum is susceptible, was published recently by the Northern Aluminum Co., Ltd., Bush House, Aldwych, London WC 2, England.

•

New DuPont Spray Paint

Duco Spray Magic enamel, in 16-ounce push button aerosol containers, was introduced last month by E. I. du Pont de Nemours Co., Wilmington. The new line includes clear, silver, gold, white, black, and six colors, all full alkyd enamels.

All colors except the grey are matches for Duco gloss enamel colors.

Highest Quality
POLYETHYLENE TUBING for AEROSOLS

. . . Now available in neatly traversed spools . . . no kinks no snarls!

Available on spools in lengths up to 3000 feet. Prevent costly delays—save time and money.

HYDRALENE NO. 35 polyethylene tubing will not split or crack even with tight friction fits.

Features:

- Only finest quality virgin material.
- Close tolerances.
- Withstands severest tests for non-splitting or cracking.
- Also available in coils or cut pieces.

This tubing is the result of years of careful development work in the aerosol field.

Write today for free samples and Prices.

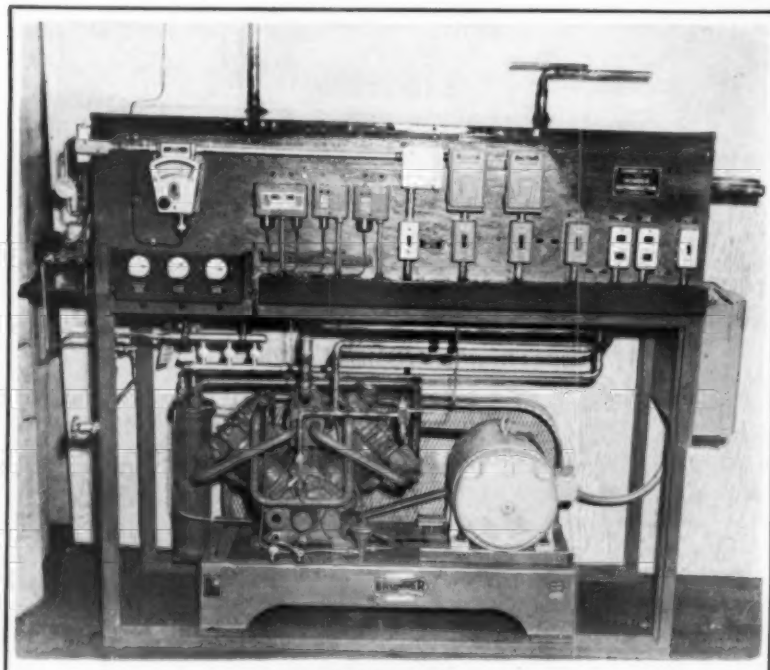
Hydrawlik

131 East First Ave
Roselle, New Jersey
Phone CHestnut 5-0368

New Sindar Perfumes

A series of newly developed perfume compositions is now being offered by Sindar Corp., New York, under the tradename, "Odrene", to impart a variety of specific fragrances to a wide range of products. R. E. Vicklund, manager of sales and development, said that the individual products have been thoroughly tested under actual use conditions. All popular fragrance types are represented, and each "Odrene" is said to have been selected on the basis of versatility, quality and stability.

The "Odrenes" will be offered for use in many types of products including waxes, polishes, cleansers, and many others. Individual "Odrenes", of various odor types, have been designed to meet the individual processing requirements of the various products to be odorized. Thus, Sindar points out, the manufacturer can choose the fragrance most appropriate for his product, knowing that stability and quality have already been determined.



AEROSOL

REFRIGERATION

THAT HAS PROVED ITSELF

Pictured above is a production unit for propellant and concentrate chilling. Fully automatic at desired temperatures.

Can be built to your specifications — installed and guaranteed anywhere.

MONSEN REFRIGERATION

228 MONTGOMERY STREET
BLOOMFIELD, NEW JERSEY
PILGRIM 3-0634

Aerosol Asthma Treatment

Aerosol steroids are proving useful in the management of certain bronchial asthma patients, Dr. William Franklin of Boston told the annual meeting of the American Academy of Allergy in Philadelphia recently.

Dr. Franklin pointed out that, if steroids applied topically in small amounts to the bronchial tree were effective, the control of asthma could be achieved with much less risk of the undesirable consequences of steroid therapy. The aerosol method has hitherto been used extensively as a treatment for bronchial asthma, and at least two companies, Riker Laboratories, and Homemaker's Products, are currently marketing pressurized nebulizers. However, this is the first reported use of steroids in aerosol form for such treatment.

The medications in Dr. Franklin's studies consisted of suspensions of steroids in fluorinated hydrocarbon propellant. They enabled the patients to inhale the steroids in amounts much less than would have been expected to be effective if absorbed systemically.

In six of seven patients treated with aerosolized prednisolone the treatment was rated "effective" by the investigators. Hydrocortisone in aerosol form was considered effective in 31 courses of treatment out of 47.

Dr. Franklin's paper was one of a number of papers covering the subject of bronchial asthma. Two other Boston researchers, Drs. John W. Irwin and Walter S. Burrage, reported that cortisone, hydrocortisone, prednisone, and prednisolone were all able to suppress symptoms of asthma indefinitely, but can cause serious side effects. They advised that only a system of trial and error can be effective in establishing a correct daily dose for each agent.

•

R&H Acrylic Latex

Rohm & Haas Co., Philadelphia, last month announced a new acrylic latex for paint manufacture. Called "Rhoplex AC-55", the emulsion is expected to find application in industrial primers and similar materials.

TGA Spokesman Attacks Delaney Bill

A STRONG attack was recently launched on the Delaney Cosmetic Bill to require cosmetic manufacturers to completely list all ingredients on the label, by S. L. Mayham, executive vice-president of the Toilet Goods Association. Speaking before the Section on Food, Drug and Cosmetic Law of the New York State Bar Association, he declared that the highly controversial bill would give almost dictatorial powers to the government.

"The Federal bill's definition of a 'new cosmetic ingredient,'" Mr. Mayham declared, "is so faulty and so complicated that even our courts would have a hard time making head or tail out of it. Next, the requirement that every cosmetic should list all of the ingredients of which it is composed is completely unrealistic. Mr. Delaney refuses to learn that cosmetics are essentially complex substances and that most of them contain from 20 to 1000 ingredients (many with complex and unpronounceable names) which would mean little to even an alleged expert as myself and nothing at all to the general public, and, unfortunately, to those members of the medical profession who are supposed to profit (in some remote way) by the information. Incidentally, such detailed labeling is required on neither food nor drugs, both of which are taken internally, while most cosmetics are merely applied to the skin."

"The powers extended to government by the Delaney proposal far exceed anything that even the most czaristic administrator would desire —and fortunately we have no czaristic people in the administration, nor are we likely to in the future. In brief, this is a very bad bill, accomplishing little for the consumer and burdening the industry with a situation which even the largest company would find extremely difficult, and the smaller company absolutely impossible. I am sure the industry does not want it and I suspect the Administration does not want it either."

Mr. Mayham declared that in his opinion neither the Delaney Bill, nor the parallel Sullivan Bill, had any chance of favorable consideration in the present session of Congress.

He explained the TGA's approval of the Williams Bill (HR-9153), declaring that in this bill the term "new cosmetic ingredient" is defined so that the Administration would not be burdened with passing on the thousands of traditional cosmetic ingredients which have long been used safely and successfully.

In order to better protect the secrecy of new ingredients, he urged that the Williams bill be slightly amended to do away with the publishing of the final proceedings on the application.

Mr. Mayham minimized the flood of objections to the bill's pre-testing provisions, pointing out that such precautions have long been the practice of the toilet goods industry anyhow. The bill will not actually put any greater burden on the chemical producer than he already bears, he declared.

CaPeM SCREW CAPPERS

Speed production for Texize Chemicals, Inc.

This Model D-6-F Rotary CaPeM increased production to such an extent that Texize Chemicals, Inc., Greenville, S. C. recently ordered a duplicate. This completely automatic line is operated continuously at production rates in excess of 200 bottles per minute.

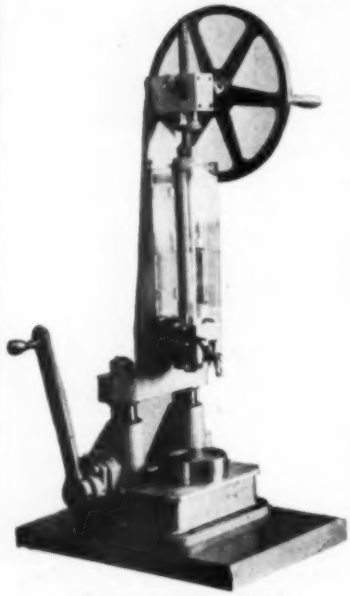
CaPeM Screw Cappers apply all types of metal and plastic screw caps to jars, bottles, cans and jugs ranging in size from 1 oz. to gallons. Speeds range from 40 to 300 containers per minute. Write for complete information.

CONSOLIDATED PACKAGING MACHINERY CORP.

1400 WEST AVENUE, BUFFALO 13, NEW YORK

DEVELOPED FOR THE CONSULTING LABORATORY, THIS APPARATUS IS THE ULTIMATE IN FUNCTIONAL DESIGN AND PERFORMANCE

Our apparatus division has been set up to make all items available to the industry. Prices and descriptive literature on request.



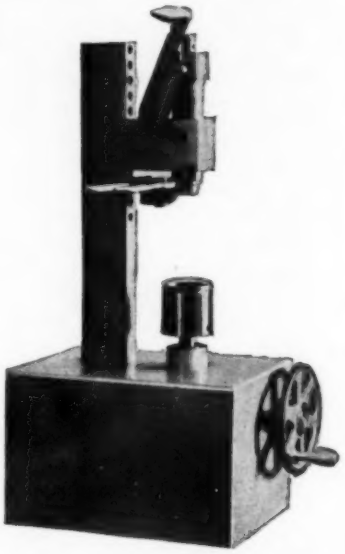
Foresman Liquefied Gas Manipulator

APPARATUS AVAILABLE

Cont. Filling Corp. Clinch Torque Meter

Liquefied Gas Manipulator w/Universal Head
Propellant Manifold for Manipulator
Hand Operated Vial Capper
Change Parts for Vial Capper
One inch opening Can Closing Press
Hydrostatic Test Units
Karl Fischer Pressure Titration Cells
Dead Stop Indicator for Karl Fischer Titrameter
Density Units
High Pressure Test Bombs
Can Sampling Units — Piercing or Valve Actuating
Pressure Gauging Unit — Pressure Balance or Water Filled
Test Ovens — Standard or Custom Built
Instantaneous Chiller Units — Mechanically Refrigerated
Electric Hot Water Test Bath Standard or Custom Built
Hot Water Bath Transfer Baskets Safety Top Tank Racks
Table Tank Rack Combinations
Safety Screen Tubes for Glass Pressure Tubes
Plastic Protective Screens
Gloves and Masks

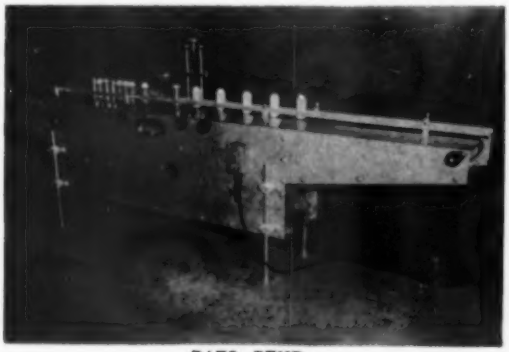
Apparatus Division
ROBERT A. FORESMAN, JR.
1690 Margaret Street
Philadelphia 24, Pa.



Foresman Hand Operated Vial Capper

CODE DATING MACHINE FOR AEROSOL CANS

Will mark the top or bottom or both at the same time



PATS. PEND.

Kiwi® Coders Corporation announces a new power-driven machine for economically and automatically code dating the concave bottoms of pressurized cans or flat bottoms of other round containers. Can also be used as a work table for affixing parts to cans.

Send details on your specific marking problems.
Literature available on all types of applications

Kiwi® Coders Corporation

4027 N. Kedzie Ave. • Dept. AA • Chicago 18, Ill.

Production Executives

Troubled With:
• **Powder filling of simulated snow**

Eliminate This With:
• Complete formulation of snow in a single stick

No Dust—Precision Fills—Economical—Low Cost
White & Colors To Meet Your Requirements
Samples on Request

Baltic Chemical Co. Inc.

115-119 Fourth Ave. Brooklyn 17, N. Y.
NEvins 8-6401

Now Available . . .

the CSMA AEROSOL GUIDE

Contains all testing methods developed by the Aerosol Division Scientific Committee and Subcommittees, plus the Premarketing Check List and The Filler Safety Manual.

96 pages

Additional copies (to members)	*To Non Members*
$5 plus postage	*$8 plus postage*

Chemical Specialties Mfrs. Assn.
50 E. 41st St. New York 17, N. Y.

Babbitt Names Tyriver

Robert E. Tyriver, former western regional manager for Chesebrough-Pond's Inc., last month was appointed manager of chain store sales of B. T. Babbitt, Inc., New York. He will be the company's chief contact with chain headquarters, buying offices, jobbers, and brokers throughout the country.

Previous to his association with Chesebrough-Pond's, Mr. Tyriver had been with a number of other soap and toilet article manufacturers, such as Yardley, Wrisley, Manhattan Soap Co., and for 20 years was eastern regional manager in the Toilet Articles Department of the Colgate-Palmolive Co.

•

Crown Appoints Congdon

George S. Congdon has been named manager of technical services by the Can Division of Crown Cork & Seal Co., Philadelphia.

Mr. Congdon has held several technical supervisory positions with Crown Can and brings to the position 20 years of experience in the food, beverage and container manufacturing fields. He had been responsible for the activities of Crown's aerosol packaging and development laboratories, which have made a number of important developments in aerosol packaging.

To further strengthen its aerosol development program, Crown also announced that the aerosol development laboratories will be supplemented by the assignment of Raymond H. Shinn as product development engineer. Mr. Shinn will devote full time to aerosol packaging and product development and will be available for field consultation on these subjects.

•

Forthmann Soap Assn. Head

Andrew K. Forthmann, president of the Los Angeles Soap Co., Los Angeles, recently was elected president of the Association of American Soap & Glycerine Producers. He succeeds E. B. Osborn, president of Economics Laboratory, Inc., St. Paul.

Mr. Forthmann served last year as the association's vice-president for the West, and has been a member of the executive board for four years.

—Convention Calendar—

American Society of Perfumers, 4th annual symposium,
Essex House, New York, N. Y......March 20

Packaging Machinery and Materials Exposition, *Atlantic City, N. J.*.....March 25-28

American Pharmaceutical Manufacturers Association,
Boca Raton Club, Boca Raton, Florida.....April 14-16

Chemical Specialties Manufacturers Association, 45th Mid-Year Meeting,
Netherland Hilton Hotel, Cincinnati, Ohio.....May 19-21

American Management Association Packaging Conference,
Hotel Statler, New York, N. Y......May 26-28

National Packaging Exposition (American Management Association),
Coliseum, New York, N. Y......May 26-29

Toilet Goods Association, Scientific Section,
Waldorf-Astoria Hotel, New York, N. Y......June 5

Toilet Goods Association, *Poland Spring House, Poland, Me.*.....June 25-29

Western Packaging & Materials Handling Exposition,
Civic Auditorium, San Francisco, Calif......Aug. 11-13

Chemical Specialties Manufacturers Association, 45th annual meeting,
Commodore Hotel, New York, N. Y......Dec. 9-11

AEROFLEX® "P" DIP TUBES

QUALITY CONTROLLED—Every shipment laboratory tested for crack resistance

- Ideal for aerosols, atomizers, squeeze bottles and lotion pumps
- Odorless, non-toxic, resistant to most filler and propellant chemicals, crack resistant through exclusive formulation of materials
- No annealing necessary
- Close tolerances maintained
- Nylon dip tubes extruded for special applications

As one of the leading suppliers, ANCHOR offers a most reliable service and on-time deliveries. New illustrated brochure "Extruded Plastics" now available. WRITE TODAY on company letterhead.

ANCHOR PLASTICS CO., INC.
36-36 36th Street
Long Island City 6, N. Y.
RAvenswood 9-1494

ARE YOUR FRIENDS IN THE PACKAGING FIELD MISSING A GOOD BET?

Here is an opportunity to let them see a copy of **Aerosol Age**, the magazine of pressure packaging, absolutely free.

We'll be glad to send single copies of the magazine to your friends and acquaintances whom you think will be interested in the pressurized packaging field . . . at no charge to anyone . . . as long as our supply of copies lasts.

Simply fill out and clip the coupon below, and mail it to us. We'll do the rest.

AEROSOL AGE
P.O. Box 31
Caldwell, N. J.

Please send a free copy of **Aerosol Age** with my compliments to the persons listed below.
If possible send a copy of the current issue.

To.....
Address.....
City.....**State**.....

To.....
Address.....
City.....**State**.....

To.....
Address.....
City.....**State**.....

Sender .....
Address .....
City & State.....

Who's Who in the Aerosol Industry

Thomas D. Johnson, Jr., has been associated closely with the aerosol business over the last five years, having served as manager of propellant sales for the Du Pont Company's "Freon" Products Division from mid-1953 until his appointment as assistant director of sales for the division last October.

A native of Birmingham, Ala., he attended Phillips Exeter Academy and was graduated from Princeton University in 1940 with a bachelor of arts degree. He joined DuPont immediately after graduation and after six months' training at the technical laboratory of its organic chemicals laboratory was assigned as a chemist in the research and plant development section of The Burnside Laboratory of the Explosives Department at Carney's Point, N. J.

In September, 1945, Mr. Johnson returned to the Organic Chemicals Department as a sales trainee, and then served as technical salesman for dyes and fine chemicals in the Portland, Ore., district until December, 1949, when he was named assistant to the technical manager of the Fine Chemicals Division. In June, 1952, he became manager of the auxiliary section of the Dyes and Chemicals Division, and a year later was named propellant sales manager for the "Freon" Products Division.

Since his association with the aerosol business, Mr. Johnson has been active in the Chemicals Specialties Manufacturers' Association, having served for the last two years as a member of the membership and program committees of its Aerosol Division. He also has served for the last two years as vice president

of the Parent-Teacher Association of the Chadds Ford, Pa., School District.

Mr. Johnson and his wife, the former Virginia Ann Spake of Kansas City, Kan., reside with their three children near Chadds Ford, Pa.

* *

John Frangos, technical director at Powr-Pak, Inc., Bridgeport, is well known in the aerosol industry. Though probably best known for his development of water-based aerosols, "breathing" protective films such as spray-on-bandages, and spray-on-shoe shine (with poly VP/VA) and other pharmaceutical formulations, he is almost as familiar to people outside the industry for his lectures and demonstrations on aerosols.

His demonstrations consist of actually making aerosols and talking about them before students, magazine editors, etc. Mr. Frangos has also given aerosol demonstrations on television's "Home Show"—seen by 1,500,000 viewers. This, along with his consultations with many of the people in the industry while with General Chemical Division, makes him probably one of the most widely known men in the aerosol industry.

Prior to his association with Powr-Pak, Mr. Frangos was president of Johnli Laboratories, research and development director at Vincent Christina, Inc., department supervisor for the V.C.A. Laboratories (part of Rexall Drugs), and chief chemist for the U. S. Vitamin Corp., as well as senior technical representative for aerosols at General Chemical Division, Allied Chemical and Dye Corp.

In his present capacity at Powr-Pak, he is in charge of foods, pharmaceuticals, insecticides, paints and industrial products. His work includes research, development, technical assistance to customers, quality control, and the setting up of a pharmaceutical production line and a separate food packaging line in Powr-Pak's new quarters.

Mr. Frangos, and his group, are currently working on the development of new formulations and the improvement of existing formulations in all fields. Their work includes all types of packaging, from true aerosols to the new "liquid-stream" dispensing package.

After receving his B.S. from St. John's University, Mr. Frangos did graduate work both at New York University and Brooklyn College. He has since returned to St. John's to lecture on and demonstrate the principle of aerosols and the various aerosol products.

druk pak inc.

36, Merkur Strasse
Zurich, Switzerland

Supplying internationally for aerosols

- Laboratory Equipment
- Filling Machines (Cold and Pressure)
- Valves (Liquid and) Foam/Cans and Glass Bottles)
- Product Concentrates
- Laboratory Service
- Advice and Consultation

Valve Clincher
Metal Cans and
Bottles
DP-104 and DP-104a

All Products manufactured to our own Designs, Formulations and Patents. Valves available from Germany and Italy—Filling Machines from Germany—Laboratory Equipment and Concentrates from Switzerland.

Publishers of "European Aerosol Survey," a quarterly periodical

Catalogues and Prices on Request.

USDA Studies Possible Insecticide Resistance in Cattle Lice

ENTOMOLOGISTS of the U. S. Department of Agriculture are investigating the possibility that certain strains of the long-nosed cattle louse may be developing resistance to some of the chlorinated hydrocarbon insecticides used to control these pests. These insecticides are often used in large-size aerosols for control of these pests.

A spray emulsion of one of these compounds, lindane, was less effective than expected when applied recently under experimental conditions at USDA's Agricultural Research Center, Beltsville, Md. Similar experimental results were obtained with DDT, which is no longer recommended for use as a spray on beef cattle because residues appear in the fat of treated animals.

These investigations by entomologist Darrell W. Anthony of possible resistance in cattle lice were triggered by failure of two normal treatments of lindane, in an emulsion spray, to eradicate the lice from a shipment of beef calves purchased by USDA for other experimental purposes. The calves were treated as a matter of established routine before being placed in various research projects.

Survival of some lice, following the two treatments, led to discovery that the original owner had also administered two spray-dip treatments of lindane in far heavier dosages.

For his experiments, Mr. Anthony used 20 of the original calves to test lindane, DDT, and malathion. Sprays containing 0.075% lindane and 0.5% DDT failed to control the lice beyond seven to 14 days. Malathion, a phosphate insecticide recently recommended for louse control on beef cattle only, gave complete control of the insects for the entire 60 days of the trial when applied as a 0.5% spray.

In laboratory tests that followed, lice from local cattle at Beltsville were found more susceptible to DDT than lice taken from the test calves. Both strains of insects, however, were about equally susceptible to lindane and malathion in these tests.

USDA investigators point out that further study is needed to determine whether resistance of lice to insecticides is likely to be an important farm problem. In view of the occurrence among other insects of resistance to various insecticides, entomologists routinely investigate any signs of possible resistance when insecticidal treatments fail to provide expected results.

There is so far no indication, however, that resistance to chlorinated hydrocarbon insecticides has become widespread among cattle lice, and approved materials are still recommended for general use.

•

To Attend Safety Meeting

Lee J. Wallace president of The Wallace Co., Bridgeport, has been invited by President Eisenhower to attend the President's 10th Anniversary Conference on Occupational Safety, to be held in Washington, D. C. March 25-27, 1958.

Around the theme — *Safety Conserves Manpower . . . Manpower Builds the Future* — The Conference will consider methods of safe-guarding our changing labor force against the emerging technological hazards of the Space Age.

•

Cooper Steps Up Ad Program

Cooper, McDougall & Robertson, Ltd., Buckhamstead, Herts, a leading British aerosol marketer, has announced a considerably stepped-up advertising campaign for its restyled range of home aerosols. The campaign will be highlighted by 15 and 30-second spot advertisements on the London, Midlands, Northern, and Welsh television stations, as well as ads in *The Daily Express, Daily Mirror*, and other leading dailies. Mason & Ferguson, London, are the agents.

THINKING ABOUT PACKAGING
NITROGEN AEROSOLS?
JG'S MODEL 14B NITROGEN GASSING MACHINE CAN HANDLE THE JOB!
LABORATORY • SEMI-AUTOMATIC • AUTOMATIC
For conventional pressure filling of king-size containers and standard-size closures:
Model 14-A
• 0 to 500 cc. capacity
• Up to 30 injections per minute
Model 14
• 0 to 300 cc. capacity
• Accurate within ± .75% on injections down to 5 grams
PURGERS • PROPELLANT PUMPS • ACCUMULATORS • CRIMPERS
STAINLESS STEEL HOT WATER BATHS • PROPELLANT SIGHT GAUGES
SINGLE AND DOUBLE PRODUCT FILL • PRESSURE BURETTES • CAN CLEANERS
JG MACHINE WORKS
452-58 WEST 46th ST., N. Y. C.
CIrcle 6-6373

PACKERS

The leading custom and contract fillers operating in your area are listed on the following pages.

EAST

Our reputation merits your confidence

CONTRACT and CUSTOM FILLING of PRESSURIZED CONTAINERS

- PRODUCT DEVELOPMENT
- WAREHOUSE FACILITIES

Aerosol Filling Division

PURITAN Distributing Co.

160 WASHINGTON STREET NORTH
BOSTON 14, MASS.
RIchmond 2-3318

Thomasson

OF PA., INC.

AEROSOL FILLING

for Contract and Private Label Marketers

Also Liquid Filling

Complete Research and Laboratory Facilities
Constant Quality Control

Norristown, Pa. BRoadway 5-4355

Old Empire

AEROSOL FILLING
AEROSOL CONCENTRATES
SHAVE CREAM
HAIR LACQUER
COSMETIC SPECIALTIES
PHARMACEUTICAL SPECIALTIES

MT. PROSPECT & VERONA AVES.
NEWARK, N. J. • HUMBOLDT 4-2121
N.Y.C. WORTH 4-7870

EAST

QUALITY & SERVICE IN AEROSOL CUSTOM FILLING...

TALFORT PRESSURE-PAK CORP.

321 W. PRATT ST., BALTO. 1, MD.

COMPLETE CUSTOM LOADING SERVICE

Exclusively Private Label Manufacturer of Aerosol Cosmetics, Pharmaceuticals and Chemical Specialties.

PRODUCTION IN ANY QUANTITY

AEROSOL METHODS

Ridge & Allentown Rd., Tylersport, Pa.
Phone Alpine 7-6032

CONN-CHEM

For Aerosol Packaging *means:*

- *Imaginative Development
- *Huge Capacity
- *Production Know-How
- *Close Cooperation—Fast Service
- *Rigid Quality Controls
- *Cost Economies

CONNECTICUT CHEMICAL RESEARCH CORP.

706 Bostwick Ave., Bridgeport 5, Conn.
FOrest 8-2511

EAST

FLUID CHEMICAL CO., INC.

1st in Contract Packaging

★ **Aerosols**

★ **Liquid Filling**

885-A MT. PROSPECT AVE.
NEWARK, N. J.
HUmboldt 5-2880

***To All Buyers of* AEROSOL PRODUCTS:**

Here are the advantages of a modern manufacturing plant built upon a foundation of over 30 years experience:

1. Contract fillers of both bottles and cans.
2. Pressure and "Cold Fill" facilities.
3. Modern up-to-date, compounding facilities.
4. Complete research and control laboratory.
5. Free product development and sampling.
6. Free Products Liability Insurance.
7. Centrally located plant.
8. Our modern materials handling and shipping rooms can also handle your drop-shipments.

ASSOCIATED BRANDS, INC.

50 WALLABOUT ST., BROOKLYN 11, N.Y.
Tel. ULster 5-2900

SUN-LAC INC.

"Successful through Service"

274 LAFAYETTE ST., NEWARK 5, N. J.

Aerosol Packaging

Small Runs Solicited

on

Cosmetics, Creams, Foams, Perfumes, Powders, Household Items, Insecticides, Industrial Products, & Plastic Sprays.

We formulate and develop new products. Quality controlled productions; bulk storage facilities; pressure & "Cold Fill" facilities. Special plan for companies requiring national distribution. We supply samples and do experimental work at no charge. Write or phone MA 3-7727 for full information.

Powders—Liquids—Emulsions

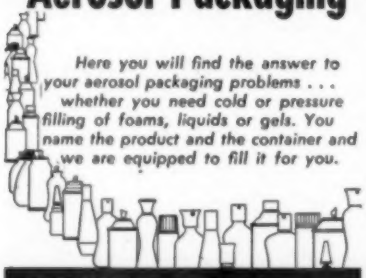
EAST

SPECIALISTS IN
AEROSOL FILLING
OF
PAINTS
AND RELATED PRODUCTS
FOR EXPERT, ECONOMICAL SERVICE . . .
RED DEVIL CHEMICALS, INC.
30 NORTH WEST STREET
MOUNT VERNON, N. Y.
Call MOunt Vernon
4-9880

AEROSOL
PACKAGING
Cold, Pressure, and Nitrogen Filling
- Contract Filling
- Private Label Service
- Small or Large Runs
- Complete Shipping

We are especially equipped to fill Tube Manifold Cylinders
SHIELD CHEMICAL CO., INC.
50 Brook Road
Needham Heights 94, Mass.
Tel.: NE 3-1433

Aerosol Packaging



Here you will find the answer to your aerosol packaging problems . . . whether you need cold or pressure filling of foams, liquids or gels. You name the product and the container and we are equipped to fill it for you.

POWR-PAK, INC.
643 North Ave., Bridgeport, Conn.

Quality
AEROSOL
FILLING
we will fill only for customers and market no product line of our own
Eska CHEMICAL CORP.
352 Livonia Ave.
Brooklyn, N. Y.
Phone: Dickens 2-5205

Stauffer Appoints White

The appointment of Russell M. White as general manager of the newly-created International Division of Stauffer Chemical Co. was announced last month from company headquarters in New York. He will be located in the New York office and will have primary responsibility for acquisition of rights to foreign processes and products; licensing of Stauffer products and processes in foreign countries; export sales; and commercial contacts abroad.

Mr. White had been manager of fertilizer promotion for Stauffer on the Pacific Coast since January, 1955. He was educated at Fresno State College and University of California and spent nearly 20 years in South Africa and Europe with another chemical company.

The establishment of the International Division by Stauffer is intended to provide greater coordination of the company's present interests abroad and to permit more rapid expansion and development in the foreign field, Hans Stauffer, president, declared.

•

Felton Assumes New Duty

Robert E. Felton, vice-president of Felton Chemical Co., Brooklyn, last month assumed direction of the firm's promotional activities.

•

Babbitt Signs PR Agency

Pan - American Public Relations, Ltd. New York, announced last month the acquisition of a new account, B. T. Babbitt, Inc., New York, manufacturer of household cleaning products. Pan-American will be responsible for all phases of Babbitt's public relations and publicity program.

Babbitt has plants located in bridgeport, Conn.; Albany, N. Y.; Oakland and Vernon, Calif.; Toronto, Canada; England, and Brazil.

•

Rexall Appoints R. J. Drews

Rexall Drug Co., Los Angeles, has appointed R. J. Drews to the post of vice-president in charge of staff administration. He will assume responsibility for the offices of public relations, personnel director, controller, treasurer, and general counselor of the company. He had been company controller.

New Toothpaste

(*From Page* 25)

controlled so as to insure uniform quantity of gas in each container, thus guaranteeing that the entire contents of the container would empty out.

Formulation Reconstruction

Working with basic fomulas furnished by Columbus Laboratories of Chicago, Dr. West's wholly-owned subsidiary, CCRC's research department began the reconstruction of Dr. West's tube type formulation.

The first step was the study of the gum systems used in most tube formulations . . . ranging from sodium carboxymethylcellulose in various viscosity ranges, to natural gums such as tragacanth, to the recently popular alginates and Irish mosses. Formulated with such other typical toothpaste ingredients as cleansing agents, humectant, foaming agents, and flavoring oils, many of these gums showed marked viscosity changes at either high or low temperatures and had to be ruled out.

Variations were made in the types of cleansing agents (tricalcium phosphate, dicalcium phosphate dehydrate, magnesium stabilized and magnesium free, anhydrous dicalcium phosphate, calcium carbonates, etc.). Various ratios of humectant using glycerin or sorbitol (or combinations of these) were evaluated. Then various ratios of foaming agents (sodium lauryl sulfate, GL4C, sulfocolourate, etc.) and flavoring oils—each individually related to other variables. Among other things, CCR researchers noted that only foaming agents designed for dentifrices could be used if no unsatisfactory aftertaste was to be insured.

The evaluation of so many complex variables in relation to each other proved invaluable in achieving an end product that met all the de-

sired requirements. Much information was gleaned as to the corrosive and flow properties of various combinations of ingredients. One preconceived notion regarding a suitable viscosity range was completely altered as a result: Tests proved that with correct readjustment of formulations, viscosity ranges need not be limited to 55,000-75,000 cps. but could go as high as 150,000 and still empty efficiently in pressurized containers.

Moreover, the flowable formulations developed proved to have a great tendency to cling to themselves, rather than to the wall of the can. All tube type formulations, as well as several competitive push-button pressurized products picked up in market testing, were found to adhere to the container wall andempty less effectively.

In addition to the rigid regard for cleanliness assumed in producing and packaging a product used orally, the CCRC research men felt the need for guaranteeing the hygienic qualities of their product on the retail shelf. A special ring cork for the orifice, designed and patented as a sanitary plug, was placed on the container to assure the consumer that the valve spout is sealed and that the paste has never been tried or tasted by a previous prober. At home, the attached plug may be replaced in the valve spout to prevent paste from caking in case it is put away for a period of time.

As a result of its long experience in the field, special specifications were developed to control the raw materials in the paste. Every formulation is produced under the close supervision of the CCR research staff and quality control division.

Final Filling Methods

Extensive research by CCR engineers enabled the company to create filling lines for the new push-button toothpastes which will insure high quality product with 100% pressure testing of the cans coming down the production line.

"We have taken every precaution," says A. O. Samuels, Connecticut Chemical Research president, "to formulate and produce a product that will do honor to our customer's name . . . and to the aerosol industry as a whole."★

Consultant's Corner

(*From Page 29*)

port of the client's technological position either in case of controversy over quality, or in the event of a claim arising from possible damage or injury involving the product. As a corollary, it might be well to point out that advice paid for and not followed may be doubly expensive. Support of the client's position or product in case of trouble will be impossible if the consultant can not be certain that his advice and recommendations have been followed.

Test programs carried out in a consulting laboratory have the advantage of complete control over all aspects of the problem—usually to an extent far beyond the scope of the usual laboratory. Also the tests involved are run routinely by personnel thoroughly conversant with the required techniques.

Hindsight has shown time after time that consulting services could have saved many times their cost in actual dollars spent and could have saved many hours and sometimes months of time. Far too often a consultant is called in when it is too late for him to do any thing but make the best of a bad situation. The opposite condition would be a happier solution for all concerned and usually at less actual consulting expense.★

Garden Show

(*From Page 17*)

menting the customary short course lectures. Workshops were held on "Store Location, Layout, and Display" (by Joseph Guillozet), "Effective Advertising" (Charles Walter), and "Credit as a Sales Tool" (Leonard Berry).

Many of the displays were essentially duplicates of those constructed for the November Garden Supply Show held at Chicago's Navy Pier Nov. 10-12.★

EAST

IMAGINATION • CREATION • REALIZATION

ATi

AEROSOL TECHNIQUES
INCORPORATED

Exclusively private label manufacturer of aerosol cosmetics, pharmaceuticals and chemical specialties.

Bridgeport 5, Conn. EDison 6-0176

Specialists in Small Run
AEROSOL PACKAGING

If you have an aerosol packaging problem, we are set up to do the job for you. Here are a few of the many specialized products we are now filling successfully:

- INSECTICIDES
- COSMETICS
- PERFUMES
- PAINTS
- STENCIL INKS
- ANTIBIOTICS
- ANIMAL SPRAYS
- PLASTIC SPRAYS

If it can be sprayed — we can help you!

NATIONAL SPRAY CAN FILLING CORP.
1238 East 14th St., Brooklyn, N. Y.

FAR WEST

CALIFORNIA'S PROGRESSIVE AEROSOL FILLER

Compare our
★ PRICES
★ QUALITY
and CONFIDENTIAL SERVICE

WESTERN
FILLS ALL PRODUCTS

WESTERN FILLING CORPORATION
6423 BANDINI BLVD., LOS ANGELES

CUSTOM PACKERS
Manufacturing Chemists

•

The west's oldest and most experienced aerosol fillers

•

WAREHOUSING — SHIPPING
COLD & PRESSURE FILLING

•

PAR INDUSTRIES, INC.
2193 E. 14th ST., LOS ANGELES, CALIF.

SOUTH & SOUTHEAST

Aerocos
Custom loaders of Aerosols . . . specializing in the cosmetic and sanitary supply products. Private label stock available. Strict quality controls.
Aerosol Corporation of the South
P. O. Box 148
Arlington, Tenn.

SOUTHEASTERN
PACKAGING CO.
Leading custom contract and private label packagers, serving all of Florida and the Southeast
P. O. BOX 8057
Madeira Beach
St. Petersburg, Fla.

Put the Pressure on that new idea!
CONTRACT & CUSTOM FILLING
COMPLETE LABORATORY FACILITIES FOR DEVELOPMENT OF NEW PRODUCTS AND IMPROVING OF OLD PRODUCTS
HUB OF THE SOUTH LOCATION
Aerosol of Georgia, Inc.
918 Boulevard N.E.
Atlanta 8, Ga.

Market Forecast

(*From Page* 15)

ment of more economical propellants, valves and dispensers is expected to increase the trend toward pressurized foods in 1958."

He added that pressure packing is rapidly leading to a whole new family of food products.

"Canco's research laboratories at Barrington, Ill. are working on reformulation of a number of foods for pressure packing," he explained. "Examples are honey, fruit toppings, jams and jellies, cheese spreads, and similar items. The consistency of these products from pressure cans will be new. The flavor, however, will be the same as for the conventional product and the consumer will find a new convenience in their use."

Sun Lac

(*From Page* 15)

capacity stainless steel mixing tanks, together with filter press through which all mixtures are pumped before entering the filling lines. Also in this room are drums of solvents, and other basic materials.

Sun-Lac concentrates its quest for customers mainly in the East, but also services customers in cities as far away as New Orleans and even to the Pacific Coast. The company avoids excessive costs by servicing nationally-marketed products in local district markets to save the customer freight rates.

If there can be any insurance against loss of customers in the filling business, Sun-Lac believes it has found the solution in increased production flexibility, progressive research to interest more and more new customers, and concentrated sales efforts in the direction of the small and large aerosol marketer.★

Renuzit's Shoe Shine (left) was one of the first such products on the market. Sun-Lac also packages the company's air freshener line.

Editor's Mailbag

(*From Page* 8)

Probably, the most important aspect of this article is the erroneous implication that there has not been any widespread use of the "Medihaler" line. While exact data cannot be given, it can be stated that several million "Medihaler" aerosols have already been sold and consumed by many hundreds of thousands of asthmatic patients in the United States and abroad. These patients keep reordering because of their satisfaction that this is a highly effective form of therapy. "Medihaler-Iso" and "Epi" have been marketed for almost two years, and we have had practically no complaints regarding their efficacy, either from patient or physician. This is probably the most cogent reason for our continued satisfaction with this original Riker development.

Irving Porush
Head of Pharmaceutical Development
RIKER LABORATORIES, INC.
Los Angeles, Calif.

The information contained in the article in question was obtained directly from the research and administrative staff of Homemaker's Products. The phrase "conventional aerosols" was not intended to include the product line of Riker, which is equipped with a special oral adapter to prevent chilling, and is packaged under higher pressures to insure better particle size distribution.

To the Editor:

We are subscribers to your magazine and find it very interesting. We are especially interested in one product named "Tabutrex" in a recent article on "Insect Repellents" and would be grateful if you will kindly let us have the address of the manufacturer, Glenn Chemical Co.

I. Schulze
AGLUKON GESELLSCHAFT MBH.
Dusseldorf, Germany

The address of Glenn Chemical is 2735 North Ashland Street, Chicago.

To the Editor:

We learn from friends that you are publishing a periodical devoted exclusively to aerosols, aerosol packaging, and related problems. This is a field in which we are very much interested, and we should ap-

preciate receiving one or two copies of your journal so that we may decide whether we should add it to our library list.

At the same time we should be grateful if you could furnish us with the names of the leading manufacturers of aerosol filling machinery in the U. S.

Research and Development Division
AGRICOLA LTD.
London EC 2, England

A number of copies have been mailed, together with pertinent pages of the 1957-1958 Buyer's Guide listing equipment manufacturers

Aerosols in Review

(*From Page* 38)

envelope. In practice it is often found that the fractured glass provides at least one tear in the plastic and this also helps the escape of the vapor."

•

THE introduction of American packaging concepts and techniques is a principal factor contributing toward the rapid expansion of the European aerosol market, George M. Factor, vice-president of Helene Curtis Industries, Inc., Chicago, is quoted as saying in the January issue of *Soap and Chemical Specialties*. Mr. Factor, who made the remarks after an extensive tour of European aerosol facilities, said that these advances had carried over to marketing.

He noted an increase in the practice of pre-selling toiletries to women through advertisements in newspapers and magazines, declaring that previously it had been the custom to sell aerosol lines almost exclusively in beauty parlors and similar limited outlets.

"Another limiting factor faced by the European aerosol producer and marketer is the choice of containers. High protective duties on imports of containers limit sizes and styles in many countries since the manufacturer of containers has a virtual monopoly in his own country. He is thus unwilling to modify his machinery to make containers specifically designed for aerosol use unless he can be assured of steady and substantial production to recover the costs of retooling. Unfortunately, few countries in Europe have a market large enough for an aerosol producer to provide the container maker with these assurances."

As other difficulties Mr. Factor cited the protective trade barriers, revenue laws which become the source of indirect taxes, and the early shortage of aerosol valves, solvents, and containers. He pointed out that alcohol, a common solvent, carries a substantial tax which limits its use to higher priced aerosol products.

•

INCREASING popularity of the self-service store in Europe may force improved label design for aerosols, as well as a general improvement in merchandising techniques, declares the December issue of *European Aerosol Survey*, English language quarterly published by Druk-Pak, Ltd., Zurich. "The trend is the increasing use of sales counter displays and the growing number of self-service stores where the customer buys principally by 'eye-appeal', with no salesman or clerk there to recommend one product over another.

"It seems fairly assured that the self-service store will become increasingly more popular in Europe. Wherever they have been tried — in France, Italy, Sweden, Germany,etc. —it is found that housewives prefer them and certainly their operating costs are lower than those of the conventional shop. The Migros stores in Switzerland are a good example. Beginning with one such store 30 years ago, the organization now has over 200 and there is scarcely a community of any size in the country which does not have at least one. In fact, the Migros competition soon had to adopt the same system."

The periodical advises "repeat" advertising stressing name of the product, dressing up of the package (preferably with colors) and detailed study of U. S. motivation research findings about color and product preferences.

The Survey concludes that the American marketer is far more intent on the merchandising market and its exploitation, while European marketers tend to concentrate more on production costs and techniques.★

MIDWEST

Aerosol Packaging
Specializing in
AEROSOL PAINTS
Enamels - Lacquers
Wrinkle and Hammertone Finish
Custom Filling
or
Private Label
Complete Aerosol and Paint
Laboratory Facilities
Cleveland Aerosol Packaging Corp.
9801 HARVARD AVE., CLEVELAND 5, O.

EVEREADY
for
AEROSOLS
complete private brand packaging
EVEREADY PRESSURIZED PRODUCTS, INC.
1101 BELT LINE ST. • CLEVELAND 9, OHIO

We can do your
Cold or Pressure
CUSTOM FILLING . . **BUT**
equally important, as a long-time manufacturer of our own complete line of aerosols we can provide valuable marketing, merchandising and product development assistance. This "know-how" is part of our service which includes the most versatile and flexible aerosol plant in the country. We can easily and economically handle any type of spray, foam, residual or mechanical break-up product—in any quantity from 100 to 1,000,000. Write, wire or phone today!
Gard Industries, Inc. Northfield, Ill.

PRIVATE LABEL AEROSOLS
Leadership earned through outstanding aerosol research laboratories . . . creative product development . . . meticulous quality control . . . effective production economies. G. Barr & Co. markets no products of its own.
THREE PLANTS TO SERVE YOU
New York Chicago Los Angeles
Address all inquiries to:
G. BARR & CO.
3601 So. Racine Ave., Chicago 9, Ill.

PETERSON
FILLING & PACKAGING CO.
•
Contract Aerosol and Liquid Filling
PHONE: 1400
HEGELER LANE
DANVILLE, ILL.

AEROSOL PACKAGING *to fit* YOUR PRODUCT

• No minimum run required and no maximum limit! Rigid quality control is maintained on all production, contract filling or custom packaging.
CHASE PRODUCTS CO.
Maywood, Illinois

✓ CHECK
Lenk FIRST!
AEROSOL
CUSTOM FILLING
SPECIALISTS IN
PRESSURE PACKAGING
THE LENK COMPANY
FRANKLIN, KENTUCKY

Symbol of
Experience in Aerosol Development & Packaging
for Aerosol "Know-How" Call
CONTINENTAL FILLING CORPORATION
123 N. Hazel • Danville, Illinois

AIROSOL COMPANY, INC.
Inventor of the Low Pressure Process
Now offers custom filling for all types of aerosol products
In the geographical center of the U. S.
— save freight —
Airosol Company, Inc.
525 North 11th Street
Neodesha, Kansas

Are you missing a big Opportunity?

Your advertisement in this space will be widely seen throughout the packaging, cosmetic, food, pharmaceutical, paint and insecticides industries.

Fleuroma Adds to Staff

Fleuroma, Inc., New York producer of perfumes and essential oils, last month announced several additions to its technical staff. To head its Chemical Research and Development Division the company named Dr. Jerome G. Kaufman, a veteran of more than 20 years in the organic chemical industry.

Fleuroma's staff of perfumers was also expanded. Jean-Paul Baude, who spent 25 years in the perfume industries of both the U. S. and France; and George Neil, also with 25 years' experience, have been appointed perfumers.

Aerosols Overseas

(*From Page* 32)

for an explanation. It used to be commonly-taught that it was necessary to answer each letter received, even to saying that you had no answer. Now a new code seems to have crept in, though now that the home business seems to be slackening a bit we hope the "old book" will be taken down again and reread.

Europe's new feeling of independent security reached its final maturity after the launching of the second Sputnik last autumn. This served to deflate the myth of the unmatchable scientific and industrial power of the United States, and at the same time gave the average European (in all his new-found innocence) the feeling that, if worst came to worst, he might be "shot over" rather than "shot up,"

In fact, it is reported that the same dining car professors who appeared in one of our earlier columns have confirmed recently that the principal U. S. scientific problem is not so much how to build and launch a space satellite but rather how to breed a dog small enough to fit into the U. S. type!

This is typical of the somewhat cruel jokes circulating in Europe where U. S. production techniques have come under closer scrutiny of late. The soberer minds here, however, recognize the ultimate potential of the U. S. industrial plant, many having personally felt either the benefit or the brunt of it twice during this century. These people honestly recognize that, so far as the U. S. economy is concerned, the Marshall Plan goods that were shipped to Europe might just as well have been dumped in the Atlantic or stored somewhere above the Arctic Circle. Lest we be misunderstood on this delicate point, we are referring here to its effect on the U. S. economy and to the burden borne by the American taxpayer.

The other side of the problem, its profoundly favorable effect on the European economy, is an established and irrefutable fact. Both the Schumann Plan and the European Economic Union are also well established facts (though it is sometimes forgotten that without the Marshall Plan neither of these would have been possible). The important thing to remember is that the Eyes of Europe are no longer turned unfalteringly towards the U. S. The belief is definitely growing that there still may be a third way.★

New Aerosol Patents

The data listed below is only a brief review of recent patents pertinent to the readers and subscribers of this publication.

Complete copies of these patents may be obtained by writing to the publisher of this magazine, Aerosol Publications, Box 31, Caldwell, N. J., and remitting 50c for each copy desired. For orders received outside of the United States the cost will be $1.00 per copy.

2,819,116. Dispensing Cap for Aerosols. Patent issued Jan. 7 to Robert H. Abramalp, Bronx, N. Y., assignor of one-half to John J. Baessler, Bronxville, N. Y.

A dispensing cap for aerosol containers having a tubular discharge valve stem comprising: an upstanding peripheral wall across the interior of which extends a valve operating tab attached for a short distance at its periphery to said wall to form a hinge portion therewith and otherwise unattached to the peripheral wall but extending closely adjacent thereto, a hub projecting from the inner side of said tab and chambered to form a socket for the tubular valve stem of an associated container, a rib extending from said hub to the side wall at the hinge portion and having therein a passage leading through said side wall, whereby pressure on the exterior of the tab may be utilized to operate the valve stem and unseat the valve for the discharge of the contents of the container through said passage.

2,820,432. Machine for Making Aerosol Filters. Patent issued Jan. 21 to Edward J. Hackney, Charles D. Faucette, and Frederick R. Darkis, Durham, N. C., assignors to Liggett & Myers Tobacco Co., New York, N. Y., a corporation of New York.

Apparatus for making aerosol filters comprising a hopper for containing a supply of finely-divided particles, two spaced walls defining an enclosed channel between them separating said hopper into two parts, a curved shoe secured to each of said walls, a rotary feeder mounted in the lower portion of each hopper and in proximity to one of said curved shoes, a chamber beneath said feeders to receive finely-divided material fed thereby and having an opening aligned with said channel, rollers to advance filamentary material through said chamber by passage thereof through said opening and by said channel, and common means to drive said feeders and said rollers in synchronism whereby the rate at which finely-divided particles are fed to both sides of the advancing filamentary material is controlled in relation to the speed at which said filamentary material moves through said chamber.

2,821,435. Valve Aligning Means. Patent issued Jan. 28 to Charles B. Wenner, Darien, Conn., assignor to Airkem, Inc., New York, N. Y., a corporation of New York.

In a mechanically actuated aerosol dispenser having means for supporting an aerosol container equipped with a depressible valve and discharge nozzle, said dispenser including a vertically movable member for depressing said valve to discharge a spray through the nozzle thereof, the improvement that comprises an aligning device secured to said vertically movable member and registering with said valve, said aligning device including means separably interfitting with said valve to prevent relative rotation between said valve and vertically movable member.

2,821,612. Label Activator. Patent issued Jan. 28 to Hilmar O. Schuetze, Chicago, Ill., assignor to Great Lakes Stamp & Mfg. Co., Chicago, a corporation of Illinois.

A device for use in activating thermo-responsive adhesive coatings on relatively thin flexible label backings, said device including a housing, a surface of said housing having mounted therein a grid formed from a plurality of spaced bars defining therebetween a series of laterally spaced slots, heating means in said housing and cooperating with said grid to heat the outer surface thereof sufficiently to activate thermo-responsive labels brought into contact therewith, air inducing means in said housing to draw air through the slots of said grid to thereby retain labels in contact with said grid during the activation thereof, said inducing means being so arranged with respect to said grid to retain labels in contact therewith notwithstanding the position of said grid, electric motor driving means for said inducing means carried by said housing, and positioning means associated with said housing to move and fix said grid in different positions, said positioning means including a fixable base for supporting the same and said housing as a single independent unit, and adjustable means intermediate said base and said housing to variably position said housing.

•

Systemic Cattle Spray

A new systemic insecticide recently developed by the USDA has been found to be highly effective in combatting grub infestations in cattle and as a deterrent to screwworm attacks in sheep and cattle, the USDA announced recently. The insecticide, called "Bayer 21/199" is administered as a spray, and could conceivably find wide use in aerosol application.

Professional Directory

TOXICITY TESTING
and IRRITATION STUDIES
on
AEROSOL PRODUCTS

Pharmacological Assays

ROSNER-HIXSON LABORATORIES
7737 South Chicago Ave.
Chicago 19, Ill.

AEROSOL PRODUCT DEVELOPMENT
Consulting-Research-Testing

THE REED RESEARCH CORP.
Winston H. Reed, Ph.D.
President and Technical Director

MILL STREET, SHELTON, CONN.
Phone Ansonia-Derby—REgent 5-4858

CONFIDENTIAL **UNBIASED**
A company devoted exclusively to development and research on Aerosols

Rommel
Allwine
&
Rommel

Registered Patent Attorneys

Suite 428,
815 — 15th STREET, N. W.,
Washington 5, D. C.

Patent Practice before
U.S. Patent Office
Validity and Infringement
Investigations and Opinions

Booklet and form "Evidence of Conception" forwarded upon request.

Trade Mark Applications

Applications for registration of the following trademarks were published in recent issues of the *Official Gazette* of the U. S. Patent Office. In not all cases are there strictly aerosol trademarks, however many of the products listed below come within the category of those for which a possible future use in aerosols is foreseen.

LEICHNER, in script superimposed on a lyre design, for perfumes, colognes, perfumed toilet waters, sachets, hair dressings, hair dyes, and various other cosmetic preparations. Filed July 19, 1956 by Siegfried Leichner, d.b.a. L. Leichner, Berlin-Dahlem, Germany claiming first use in 1894.

SAVE A LIFE in bold face capitals, for aerosol bomb fire extinguisher. Filed Dec. 3, 1956 by Almar Supply Co., Indianapolis, with first use Sept. 17 of same year.

REFRESHENCE, for cologne. Filed June 25, 1956 by Houbigant, Inc., New York, claiming first use Oct. 21, 1955.

WHITE HORSE, with a horse design on an inverted rectangular reverse design, for perfumes, cosmetics, essential oils for use in preparing cosmetics, shaving creams, and various other cosmetic preparations. Filed Feb. 11, 1957 by Gala of London Ltd., London, England, with priority claimed on British registration dated Aug. 29, 1956.

FIRE DEFY-ER, in large solid letters, for aerosol type fire extinguishers. Filed May 16, 1956 by Albert I. Rappaport, d.b.a. Fire Box Industries, Long Island City, N. Y. to Fire Box Industries Inc., Long Island City, with first use claimed March 29, 1956.

DUFY RED, MANET MAUVE, AND DA VINCI ROSE, all three for cosmetics, including liquid nail polish removers, clear and colored nail enamels, liquid top coating or sealer, etc. Filed Jan. 16, 1957 by Juliette Marlen, Inc., Ridgefield, N. J., with first use July 16, 1955.

CHASE'S, both in script and in capitals, for flat, glossy, and metallic enamel paints, and transparent surface coatings, all packed in aerosol bombs and applied by spraying directly from the bomb. Filed Aug. 23, 1957 by Chase Products Co., Broadview, Ill. claiming first use in or about May 1946.

MYSTIC SHEEN, for lens cleaner. Filed Feb. 18, 1957 by Albert W. Pendergast, d.b.a. Albert W. Pendergast Safety Equipment Co., Philadelphia, Pa., claiming first use March 20 of previous year.

PENTASPRAY, for medicinal preparation for use in the treatment of diseases of the upper respiratory tract. Filed Aug. 5, 1957 by Merck & Co., Inc., Rahway, N. J., with first use July 15, 1957.

MARLO, for perfumes, and cosmetic and toilet preparations, including skin freshener, cold cream, and cologne. Filed Jan. 11, 1956 by Marlo Manufacturing Corp., Evansville, Ill., claiming first use Dec. 15, 1919.

PADDOCK CLUB, solid capitals superimposed on two pennant designs, for cosmetic and toilet preparations, including shaving cream, colognes, toilet waters, and deodorants. Filed March 18, 1957 by Paddock Club, Ltd., New York, with first use Jan. 10, of same year.

•

Millions See TV Program

"Beauty and the Beast", the first of the Shirley Temple storybook television series, which was co-sponsored by John H. Breck. Inc., Springfield aerosol marketer, was seen recently by millions of viewers, Edward J. Breck, company president, pointed out that Trendex ratings indicated that of 41 million television homes in the country, more than 26 million were tuned in during the period of the show.

"We anticipate," continued Mr. Breck, "that the program will greatly aid in the sales of the Breck preparations featured in the series." One of the three is "Breck Hair Set Mist", an aerosol hair spray.

•

DuPont Shifts Freon Staff

Dr. Donovan E. Kvalnes, technical manager of the "Freon" Products Division of DuPont, recently was named to the additional post of division sales development manager. In his new post he succeeds Dr. Edmond G. Young, who was made manager of development conferences in the marketing research department of DuPont's development department.

At the same time the company announced the appointment of Dr. Frank W. Blodgett as technical assistant to Dr. Kvalnes on sales development problems.

•

Risdon's Ferguson Dies

John E. Ferguson, former chief engineer of the Risdon Manufacturing Co., Naugatuck, Conn., died recently at 71 after a long illness. Before joining Risdon, Mr. Ferguson was a vice-president of Bridgeport Brass Co. for 15 years.

•

Chemway Names Brunelli

Chemway Corp., New Brunswick, N. J. last month named Vincent P. Brunelli president of its Lady Esther Division. He is also head of Chemway's Household Products Division.

Colgate Names Coneybear

The appointment of Savery F. Coneybear to the newly-created position of director of its New Products Development has been announced by the Colgate-Palmolive Co., New York. He was formerly director of research in the company's Research and Development Department.

Mr. Coneybear will be responsible for receiving and evaluating new product ideas from within and outside the company, and for encouraging individual inventors and companies to submit products, processes and developments, available for commercialization, to Colgate. He will locate in the company's headquarters building at 300 Park Avenue, New York.

•

VAH Announces Employee Plan

Van Ameringen-Haebler, Inc., New York manufacturer of perfuming and flavor materials, last month announced a new and improved employee's security program financed entirely by the company.

The new program provides a number of additions to the old employee benefit plan, including increased retirement income payments (starting at age 65) as well as early retirement provisions which can be exercised by the employee. The program also offers improved life insurance, with extra payments for accidental death, as well as weekly disability benefits. In addition, hospitalization and surgical plan coverages have been improved and a major medical contract included in the new security program.

W. Alec Jordan

Chemical Business Counsel

- Marketing Analyses
- Product Development
- Evaluation of Purchasing Determinants

52 Park Ave., New York 16, N. Y.
ORegon 9-1657

Index to Advertisers ▸ ▸ ▸ ▸ ▸ March 1958

—A—

Aero-Matic Laboratories 54
Aerosol Corp. of the South..... 66
Aerosol Methods 63
Aerosol of Georgia..... 66
Aerosol Research Co..... 3
Aerosol Service AG.....Feb.
Aerosol Techniques, Inc..... 65
Airosol Co., Inc..... 68
Air Reduction Co.....Feb.
Alpha Eng. & Machine Wks..... 71
American Can Co.....Dec.
Anchor Plastics Co., Inc..... 59
A-M-R Chemical Co., Inc..... 63
Armstrong Laboratories .....Feb.
Associated Brands, Inc..... 63

—B—

Baltic Chemical Co..... 58
Barr, G., & Co..... 67
Builder's Sheet Metal Works, Inc. 52

—C—

Chase Products 68
Clayton Corp. .....Dec.
Cleveland Aerosol Pkg. Corp..... 67
Con. Packaging Mach. Corp..... 57
Connecticut Chemical Research.. 63
Continental Can Co.....Dec.
Continental Filling Corp..... 68
Cowles Chemical Co.....2nd Cover
Crown Cork & Seal Co..... 10

—D—

Dodge & Olcott, Inc.....Feb.
Donrico Inc. 35
Dow Chemical Co.....Dec.
Druk-Pak Inc. 61
du Pont de Nemours Co., E. I..... 50

—E—

Eska Chemical Corp..... 64
Eveready Products Inc..... 67

—F—

Fairfield Chemical Div..... 39
Florasynth Laboratories, Inc.....Feb.
Fluid Chemical Co..... 63
Foresman, Robert A., Jr..... 58
Fritzsche Bros. 41

—G—

Gard Industries Inc..... 67
General Aniline & Film Corp..... 10
General Chemical Div.....26, 27
Givaudan-Delawanna, Inc. .....Feb.

—H—

Hydrawlik Co. 55

—J—

JG Machine Works..... 62

—K—

Kiwi Coders Corp..... 58

—L—

Lenk Manufacturing Co..... 68
Ludwig Closures Inc.....Feb.

—M—

Magnus, Maybee & Reynard, Inc..Feb.
McLaughlin Gormley King Co....Feb.
Mojonnier Associates Inc..... 4
Monsen Refrigeration 56
Motomco, Inc. .....Jan.

—N—

National Spray Can Filling Corp. 53, 65
Newman-Green Inc. 30, 31
Norda .....Feb.

—O—

Ohio Chem. & Surgical Equip. Co..Feb.
Oil Equipment Laboratories..... 52
Old Empire, Inc..... 63

—P—

Par Industries, Inc..... 65
Penick, S. B., & Co..... 33
Pennsalt Chemicals Corp..... 37
Peterson Filling & Packaging Co. 3rd Cover, 68
Pfizer, Chas., & Co..... 7
Polak & Schwarz Inc.....Dec.
Polak's Frutal Works.....Feb.
Powr-Pak, Inc..... 64
Precision Valve Corp..... 21
Prentiss Drug & Chem. Co.....Jan.
Protection Chemical Products Co..Jan.
Puritan Distributing Co..... 63

—R—

Red Devil Chemicals Inc..... 64
Reed Research Corp..... 69
Richford Corp. 48
Risdon Mfg. Co.....4th Cover
Rommel, Allwine & Rommel..... 69
Rosner-Hixon Laboratories 69

—S—

Schimmel & Co.....Feb.
Shield Chemical Co..... 64
Solvay Process Division Allied Chemical & Dye Corp.... 9
Southeastern Aerosols 66
Stalfort Pressure-Pak 42, 63
Sterling Seal Co.....Jan.
Sun-Lac Inc. 63
Sun Tube Corp..... 6

—T—

Thomasson of Pa., Inc..... 63
Texas Aerosol Co..... 66
Tube Manifold Corp.....Feb.

—U—

Ungerer & Co.....Dec.

—V—

Valve Corp. of America.....Dec.
van Ameringen-Haebler, Inc.....Feb.
Velsicol Chemical Corp..... 47

—W—

Western Filling Corp..... 65
S. S. White Dental Mfg. Co..... 71
Wisc. Alumni Res. Foundation...Feb.

SCC Lists 1958 Committees

Harry Isacoff, coordinator of van Ameringen-Haebler's aerosol product research and chairman of the New York Chapter of the Society of Cosmetic Chemists, last month appointed the following SCC committee chairmen to serve during the current year:

Program chairman: John M. Longfellow, Colgate-Palmolive Co.; house chairman: Robert B. Warfield, Bristol-Myers Co.; membership chairman: Irving Colbert, Malmstrom and Co.; publicity chairman: Saul A. Bell, Prince Matchabelli, Inc.; public relations chairman: Maria Wiener, Fluid Chemical Co.; education chairman: Herbert Edelstein, Revlon, Inc.; entertainment chairman: George Kachajian, Dow Corning Corp.; by-laws chairman: Martin Katz, Revlon, Inc.; hospitality chairman: Nicholas J. Accousti, R. H. Macy and Co.; interprofessional relations chairman: Arthur J. Cohane, Leberco Laboratories; ex-officio chairman: Warren B. Dennis, Jr., Lady Esther Division of Chemway Corp.

Canadian Paint Aerosols

Metaltone of Canada, Ltd., Toronto, recently introduced a new line of aerosol-packaged consumer paints, which are reported to be the first pressure-packaged paints manufactured in Canada. Filled by Aerosol Packaging of Canada, Toronto custom filler, the new product line comes in 28 colors in 16-ounce cans.

Ellis, May & Chadwick, Ltd., Toronto, is directing the advertising campaign for Metaltone.

OVER THE TRANSOM

THE statement criticizing aerosols, issued last month by the Collapsible Tube Manufacturer's Council (reported on page 45 of this issue) should, we think, generate a good deal of amusement in the aerosol industry. The statement did little real good, and instead served to call the attention of the aerosol and other packaging industries to how much the collapsible tube makers are worried about future inroads among their prime customers.

Apparently what precipitated the statement was the recent rush by toothpaste manufacturers, many of them tremendous volume tube customers, to jump on the aerosol bandwagon. The handwriting on the wall is there for all to see, and ten-year-old predictions by the aerosol industry that its packages can be more efficiently used for nearly anything in a tube, bottle, or jar are being dusted off and re-examined in alarm by the manufacturers of these items.

What is especially ironical about the specific allegations made in the Tube Manufacturers' statement is the fact that most of them no longer really apply to the aerosol package (if they ever did). The space comparison is a good case in point. It *is* true that the collapsible tube is reduced in size as the product is used up—and that the aerosol isn't. But the point to remember here is that the aerosol is so much more handy to use, holds so much more product under pressure than the same volume of tube, that the space factor isn't really important.

The stress on the safety factor also has little validity. The conventional metal aerosol is as safe as the tube, and the flow of product is considerably easier to control.

And so it goes . . . All of the other objections can be similarly refuted. Look for the aerosol industry to sustain similar attacks in the coming years as its impact is felt more and more in different industries.

* * *

As was predicted in this column several issues ago, the mad rush to market an aerosol-toothpaste is extending to most of the major marketers. In fact, we will be greatly surprised if all but the most conservative aren't on the market with some kind of a pressurized product by mid-summer. Latest to confirm has been Procter & Gamble, Cincinnati, which admitted last month that it is test marketing an aerosol version of "Gleem" in the Easton, Pa.-Phillipsburg, N. J. area. Carter Products, maker of "Rise," is test marketing an aerosol toothpaste called "Sno White." As with the Colgate and Rexall products, "Gleem" and "Sno White" will retail at about a dollar.

Also, Weco Products Co., Chicago, manufacturer of the "Dr. West" line, is reported to be actively considering early introduction of an aerosol dentifrice. Its product is rumored to be already in the production stage, and Weco is closely studying the market potential.

* * *

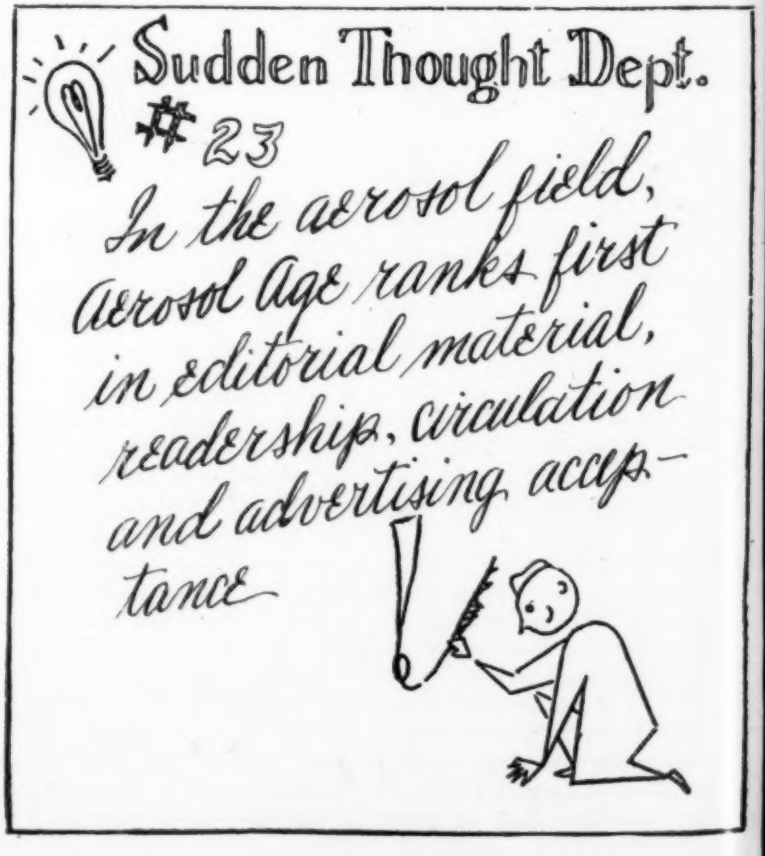
All this activity in the dentifrice and food fields is causing some trade publications that have hitherto been almost cool to (or at least cautious about) the aerosol idea, to concentrate much more attention on pressurized packaging. Packaging Parade, Modern Packaging, and Drug Trade News are just a few of the ones that have been devoting more and more space to aerosols of late.

* * *

Quotation of the month:

"Aerosol-dispensed foods will be selling at rate of 1 billion cans a year by 1965, says M.I.T.'s Dr. George Fuld, assistant professor of food engineering. Food was contained in but few of the more than 350 million aerosol-type containers sold last year, but food firms are working hard to spray dozens of products (*e.g.*, pancake mix, barbecue sauce, soda-mix flavoring), hope to surge forward when government approves pressure chemicals."

Time Magazine, February 10


Sudden Thought Dept.
#23
In the aerosol field, Aerosol Age ranks first in editorial material, readership, circulation and advertising acceptance